Close Combat Tactical Trainer
(CCTT)

ACCREDITATION REPORT

21 May 1999

Close Combat Tactical Trainer
Accreditation Plan

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EXECUTIVE SUMMARY

The TSM CATT recommends that the TRADOC Deputy Chief of Staff – Training (DCST) accredit the CCTT for use to train the close combat heavy force at the platoon and company/troop levels. Specifically, request that he accredit CCTT for training of all tasks rated High or Moderate by the accreditation team (Figure 3-1).

The accreditation team was chaired by the TSM CATT and included permanent participation by Subject Matter Experts (SMEs) from both proponents of the CCTT, United States Army Armor Center's (USAARMC) and United States Army Infantry Center's (USAIC). The accreditation team reviewed the data provided by the CCTT Verification and Validation (V&V) Teams as well as test data and government documentation. The V&V teams and their areas of system analysis are listed in Table 1.

Table 1

	V & V FUNCTIONS & REPORTS					
AGENCY	**IV&V (Software)**	**Manned Module & DI**	**CGF/SAFOR**	**OC Workstations**	**Network & System**	**Control Workstations & AAR**
IDT Int. Dev Tm	X	X	X	X	X	X
TSM CATT		X	X			
AMSAA		X	X	X		
EAC				X	X	X
TSD			X			
TRAC	X		X			
PM Nations	X					

The accreditation team has assessed all of the CCTT acceptability criteria against the available data and documentation on the CCTT system at the time of this report. These acceptability criteria and assessment are listed in Table 2 below.

Table 2

FORM 4-13 Rating of Acceptability Criteria

A= Acceptable AR= Acceptable with risk U= Unacceptable

Acceptability Criteria	Rating
1. Data Values & Sources	AR
2. Algorithms, Terrain, & Environment	A
3. BLUFOR & OPFOR	A
4. Simulated Entities	A

5. Protocol Data Unit Exchange	A
6. Data Items Exchange	AR
7. System Support	A
8. Configuration Management	A
9. Training Support	AR
10. Negative Training	A
11. Training Uses	A

The team evaluated each of these criteria as either Acceptable or Acceptable with Risk. None of the risks are substantial and most are directly linked to funded efforts that, in time, will eliminate the risk entirely. Detailed discussion of these criteria and the associated risks can be found in section 3.1 of the main document.

The accreditation team also conducted a Mission Training Plan (MTP) task-based assessment of the CCTT. The MTPs used for the evaluation were those for which the system was built:

- ARTEP 17-237-10 MTP, Tank Platoon (1996/07/09)
- ARTEPs 7-3/4 MTP & 7-8 MTP, Mechanized Infantry Platoon/Squad
- ARTEP 71-1 MTP, Tank/Mechanized Infantry Team (1988/10/03)
- ARTEP 17-57-10 MTP, Scout Platoon (1996/07/01)
- ARTEP 17-487-30 MTP, Regimental Armored Cavalry Troop (1991/09/03)

The MTP task assessment was based on a modification of the Task Performance Support Code methodology. Section 3.3.12 provides the detailed assessment of these tasks.

1. PURPOSE

The purpose of this report is to identify the results of the TRADOC assessment of the eleven CCTT acceptability criteria and task-based assessment of the USAARMC's and USAIC's MTPs for platoon and company level close combat heavy forces. This report is pursuant to guidance provided in Army Regulation 5-11 (AR 5-11) *Army Model and Simulation Management Program*, the applicable requirements of the Department of Army Pamphlet 5-11 (DA Pam 5-11) *Verification, Validation, and Accreditation of Army Models and Simulations* and the TRADOC System Manager Combined Arms Tactical Trainer (TSM-CATT) *Close Combat Tactical Trainer Accreditation Plan*.

2. BACKGROUND.

2.1 General CCTT System Description.

The CCTT is comprised of a group of interactively networked simulators and command, control, and communications workstations replicating the vehicles and weapon systems of a cavalry squadron, mechanized infantry or armor battalion task force and its supporting Combat, Combat Support, and Combat Service Support elements at the ground troop and company/team level of training. The Army will field two versions of the CCTT system: a fixed version for the Active Component and a mobile version for the Reserve Component. Army Aviation, Field Artillery, Air Defense, and Engineer simulator modules will interface and interact with CCTT in the future under the Synthetic Environment Core program. These future modules will require interface capability and software interoperability with CCTT.

2.2 Equipment Description.

The CCTT system consists of the following modules and/or systems:

Manned Modules

M1A1	Abrams Tank
M1A2	Abrams Tank
M2/3A2	Bradley Fighting Vehicle (BFV)
M981	Fire Support Team Vehicle (FIST-V)
M113A3	Armored Personnel Carrier
M1025	High Mobility, Multipurpose Wheeled Vehicle (HMMWV)
DIM	Dismounted Infantry Module

Support Work Stations

CTCP	Combat Trains Command Post
SAF/CGF	Semi-Automated Forces / Computer Generated Forces
UMCP	Unit Maintenance Collection Point
FABTOC	Field Artillery Battalion Tactical Operations Center
TACP	Tactical Air Control Party
CES	Combat Engineer Support Workstation
FDC	Fire Direction Center
FSE	Fire Support Element

Control Workstations

MCC	Master Control Console
ARR	After Action Review
MC	Maintenance Control

Communication and Visual Systems

2.3 CCTT Developer and Proponents.

Developer: Project Manager, Combined Arms Tactical Trainer (PM CATT)

Application Sponsor: Training and Doctrine Command (TRADOC)

Verification and Validation Proponent: TRADOC System Manager, CATT (TSM CATT)

Accreditation Proponent: TRADOC Deputy Chief of Staff for Training (DCST)

2.4 Intended Uses.

2.4.1 CCTT General Requirement.

The CCTT is being fielded to overcome the deficiencies revealed in the Mission Area Analysis for the Close Combat Forces as detailed in the Mission Area Battle Plan and the Battlefield Development Plan. The active and reserve components of the United States Army need the capability to train the total combined arms force on a simulated, fully interactive, real time battlefield. A system is required to train and sustain individual and collective (crew through battalion task force) tasks and skills in command and control, communications, maneuver, and to integrate the functions of combat support and combat service support units. This requires the capability to simulate, in real time, the conduct of combat operations in a realistic environment with an appropriate and challenging opposing force that will require realistic individual, crews and staff actions, placing the stresses of combat on all participants.

The CCTT system allows individuals, crews, and units to operate in a virtual combat environment. This reduces the impact of weapons effects restrictions, safety concerns, terrain limitations, time allocation, and helps to overcome the adverse effects of crew turbulence and scarce resources. This CCTT allows units to raise or maintain their level of training and ensure more efficient use of their training assets when they train in the field.

The CCTT training goal is to practice and achieve a level of proficiency on collective tasks and subtasks prior to field training. The CCTT will also be used as a sustainment trainer in conjunction with periods of field training and as an advanced trainer that can provide conditions for task training that are more intense than available during field training conditions. The CCTT system will be fielded initially in platoon and company team sets. Some of the sets may be expanded to battalion task force size under preplanned product improvements (P3I) and additional sets of battalion task force size may be procured.

2.4.2 Task-Based Training.

The Army Combined Arms Training Strategies (CATS) are now MTP task focused rather than training event focused. The intended uses of the CCTT system and this TRADOC accreditation of CCTT must support this approach in order to provide meaningful information to unit trainers. CCTT is primarily intended to support the training of close combat heavy platoon, company/team and cavalry troop units. Therefore, the accreditation assessment is based on the currently approved doctrine for those units:

- ARTEP 17-237-10 MTP, Tank Platoon (1996/07/09)
- ARTEPs 7-3/4 MTP & 7-8 MTP, Mechanized Infantry Platoon/Squad
- ARTEP 71-1 MTP, Tank/Mechanized Infantry Team (1988/10/03)
- ARTEP 17-57-10 MTP, Scout Platoon (1996/07/01)
- ARTEP 17-487-30 MTP, Regimental Armored Cavalry Troop (1991/09/03)

2.4.3 CCTT M&S Category Identification.

DA Pam 5-11 identifies numerous M&S categories. The CCTT conforms to the M&S “Form” category because it is both a physical and procedural model. As a physical model it represents real world objects as they relate to the simulator. As a procedural model it expresses dynamic relationships in terms of mathematical or logical processes. The CCTT can also be classed by “purpose” since it is an educational training simulation environment that will replicate the daily operational requirements needed in the decision making process of individuals, crew members, commanders and their staffs.

2.5 Data Sources.

2.5.1 Information Sources.

One of the key factors to a successful accreditation program is the information sources that are provided through documentation, SMEs, Limited User Tests, the Initial Operational Test and Evaluation, the CCTT Training Support Package, CCTT verification and validation efforts, and Army leaders/trainers. These sources will provide necessary and sufficient information for assessing acceptability.

2.5.2 Information Sources Matrix.

Figure 2-1 provides a cross-linked listing of the sources of information used in the assessment of the acceptability criteria during the accreditation process.

Figure 2-1 INFORMATION SOURCES MATRIX

		ACCEPTABILITY CRITERIA										
INFORMATION SOURCES		Data Values	Algorithms Terrain, & Environment	BLUEFOR & OPFOR	Simulated Entities	PDU Exchange	Data Items Exchange	System Support	Configuration Management	Training Support	Negative Training	Training Uses
VERIFICATION & VALIDATION REPORTS	Software IVV	X	X	X	X	X	X		X			
	Form, Fit, & Function			X	X						X	
	Target Acquisition	X	X	X	X						X	
	Delivery Accuracy	X	X	X	X						X	
	Rate of Aimed Fire	X	X	X	X						X	
	Weapons Characteristics	X	X	X	X						X	
	Vulnerability	X	X	X	X						X	
	Mobility	X	X	X	X						X	
	Combat Damage & Repair	X	X	X	X						X	
	Stochastic Reliability	X	X	X	X						X	
	Deterministic Reliability	X	X	X	X						X	
	Terrain & Environment		X								X	
	Ops Center Workstations	X	X	X	X		X				X	
	SAF/CGF Workstations	X	X	X	X		X				X	
	Network & System					X	X		X			
LUT & IOTE	Test Results		X	X	X					X	X	X
	Training Support Packages							X		X	X	
	Trainer Observations		X	X	X						X	
	Trainee Observations		X	X	X						X	
TASK ANALYSIS	Task Uses Assessment											X
OTHER SOURCES	Accreditation Tm Observations		X	X	X			X		X	X	
	Government Documentation	X	X	X	X	X	X	X	X			
	Contractor Documentation	X	X	X	X	X	X	X	X			

2.6 Verification and Validation.

The complexities of CCTT mandated that the V&V efforts be accomplished by module and subsystem (see paragraph 2.2). Figure 2-2 relates the organizations that conducted the verification and validation of the modules and subsystems. These organizations provided V&V reports as shown below. Details of each V&V effort are reflected in the VV&A Master Plan and the individual plans developed by each organization. Both the V&V Reports and individuals from the organizations conducting the V&V will be used as information sources in the accreditation process.

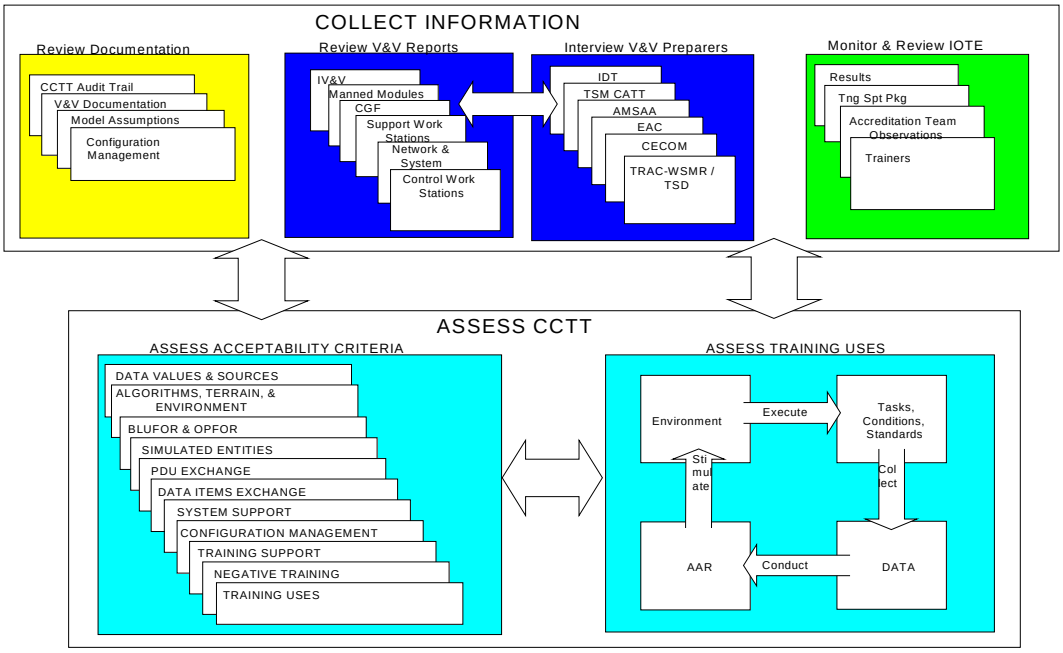
FIGURE 2-2 VERIFICATION & VALIDATION TEAM RESPONSIBILITIES

	V & V FUNCTIONS & REPORTS					
AGENCY	**IV&V (Software)**	**Manned Module & DIM**	**SAF/CGF**	**OC Workstations**	**Network & System**	**Control Workstations & AAR**
ITD Int. Dev Tm	X	X	X	X	X	X
TSM CATT		X	X			
AMSAA		X	X	X		
EAC				X	X	X
TSD			X			
TRAC-	X		X			
PM Nations	X					

2.7 Accreditation Process

In accordance with the CCTT Accreditation Plan, a CCTT Review Team formed to conduct this assessment. See Annex A for team membership and schedule of events. This team, chaired by TSM CATT, included permanent representation from each of the system proponent centers. The team met frequently over the period June 1998 -April 1999 to review the source documentation, conduct detailed system capabilities analysis, assess the first ten acceptability criteria and finally complete the training uses assessment for the MTP tasks. The data review and assessment concept is as shown in Figure 2-3. Figure 2-4 provides a representation of the accreditation process followed for each acceptability criterion.

FIGURE 2-3 CONDUCTING THE REVIEW



The CCTT Accreditation Review was conducted in two phases. Phase I included the collection and review of information from the V&V testing of CCTT, the Limited User Test, the Initial Operational Test and Evaluation (IOTE) of CCTT, and other development, test, and use documentation. Structure for this review was broken into five categories, generally following those of paragraph 5 of the TDR (Essential Characteristics).

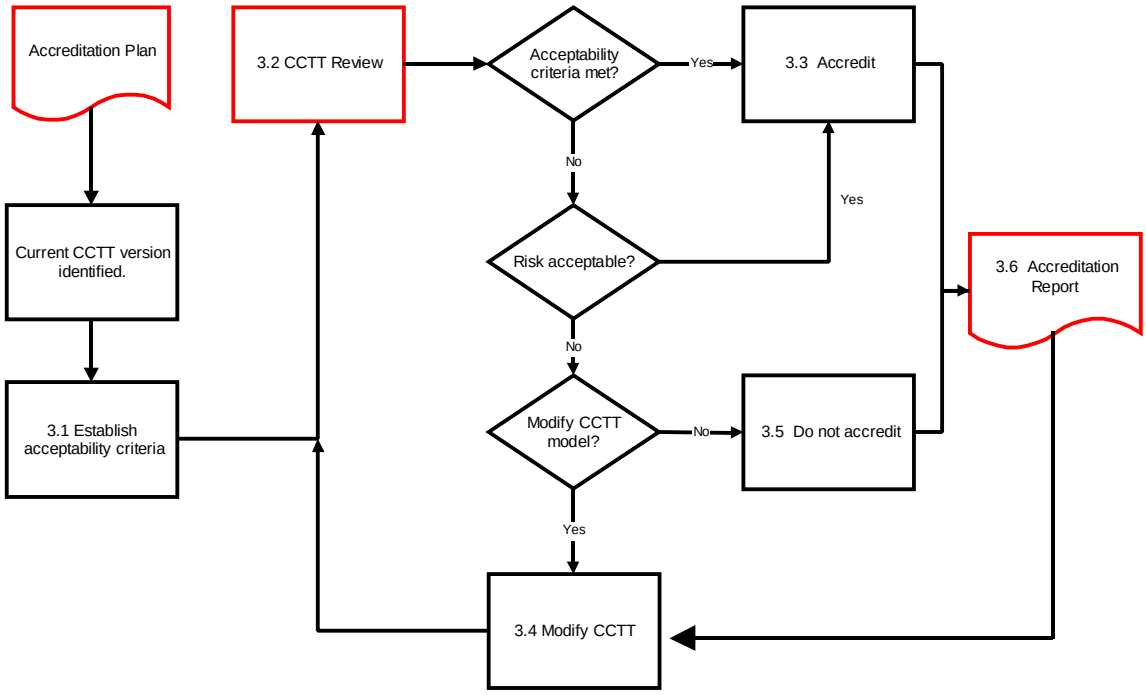
- System Requirements
- Vehicle Simulator and Dismounted Modules
- Simulated Terrain and Environment
- C&C, CS, and CSS Simulator Support
- Operations Monitor and AAR

Detailed descriptions of information sources are found in Annex C. The information was collected, reviewed, and processed throughout the review period. Team members met during this phase to assimilate information and ensure a common understanding of the CCTT system.

Phase II was the assessment of the acceptability criteria. The acceptability criteria are necessary and sufficient conditions for establishing the viability of CCTT as a training model and simulation. During this phase, team members met every other week for 2-3 days to focus on a specific set of criteria. Prior to rating the Acceptability Criteria, the CCTT Review Team first reviewed and rated elements from the V&V Reports. Next, the Team ensured all requirements from the TDR are addressed by rating each of the major requirements. With the V&V ratings,

the TDR ratings, and the Training Use Assessment as background sources, the Team made its final subjective assessment and ratings for each of the eleven Acceptability Criteria.

Figure 2.4 CLOSE COMBAT TACTICAL TRAINER ACCREDITATION PROCESS



As described in the accreditation plan, if the model met or exceeded the acceptability criteria, then CCTT was deemed suitable as a training simulation. If the criteria were not met, the Review Team assessed the risk involved and determine if there is an acceptable level of risk for each criterion.

3. ASSESSMENT

3.1 Acceptability Criteria.

3.1.1 Data Values & Sources. That all required data values are well defined and data sources for obtaining required data have been identified and used.

In the assessment of the data values and sources implemented in CCTT the accreditation team examined information provided in the V&V reports provided by each of the V&V teams as well as the IV&V done under contract to the PM. The data considered in this assessment included:

- Delivery Accuracy
- Vulnerability
- Rate of Fire
- Vehicle and Dismounted Infantry Mobility
- Combat Damage
- Repair
- Failure Rates (Stochastic and Deterministic)
- Lethality
- Acquisition

The scope of this effort considered the sources of the data, the completeness of the data and the accuracy of the data. As this system does not use classified data in its baseline configuration, the issue of accuracy is interpreted as data appropriate for its intended use. The accreditation team identified data shortfalls and where appropriate identified action required to ensure the data implemented is acceptable.

3.1.2 Algorithms, Terrain, & Environment. That the algorithms, terrain, and environment represented are functionally adequate to support the required use of the system.

3.1.2.1 Algorithms. In the assessment of the algorithms implemented in CCTT the accreditation team examined information provided in the V&V reports provided by each of the V&V teams as well as the IV&V done under contract to the PM. The algorithms considered in this assessment included:

- Delivery Accuracy
- Vulnerability
- Rate of Fire
- Vehicle and Dismounted Infantry Mobility
- Combat Damage
- Repair
- Failure Rates (Stochastic and Deterministic)
- Lethality
- Acquisition

The scope of this effort considered the sources of algorithms, the fidelity of the algorithm and the accuracy of the implementation of the algorithm. As this system does not use classified information in its baseline configuration, the issues of accuracy and fidelity are interpreted as appropriate for its intended use. The accreditation team identified any algorithm shortfalls and where appropriate identified action required to ensure the algorithm implementation is acceptable.

3.1.2.2 Terrain. In the assessment of the terrain databases implemented in CCTT the accreditation team examined information provided in the V&V reports provided by each of the V&V teams as well as the IV&V done under contract to the PM. The Primary #2, Southwest

USA desert, terrain database is the only database examined in some detail by the teams. There was limited testing of the Primary #1, Central USA temperate, database and, where appropriate, comments are included based on that testing. The Primary #1 database has not been completed to specification and therefore all desired testing was not performed.

The scope of the assessment of the Primary #2 terrain database included examination to ensure implementation of each of the unique capabilities called for in the Training Device Requirements (TDR) document:

- topological features (natural/manmade)
- capability to provide cover & concealment
- UTM @1:50,000 scale
- size of terrain area
- soil types

3.1.2.3 Environment. The scope of the assessment of the environmental conditions and variables in the CCTT included examination to ensure implementation of each of the unique capabilities called for in the TDR document:

- variable lighting conditions to include night
- obscurants (natural/manmade)
- effects of precipitation

3.1.3 BLUFOR & OPFOR. That the levels of semi-automated Blue Forces (BLUFOR) and Opposing Forces (OPFOR) force structure and integration have the required fidelity and resolution.

3.1.3.1 The assessment of the levels of force structure, fidelity, behaviors and capabilities of BLUFOR and OPFOR were separated from the analysis of semi-automated force data and algorithms. Within this assessment of SAF the responsibility for analysis of BLUFOR and OPFOR was split between two SME agencies. TRAC-WSMR assessed the BLUFOR and TRADOC Threat Support Directorate assessed the OPFOR. TSM CATT supported both teams directly with SMEs as well as coordinating for other soldier SMEs as required.

3.1.3.2 The scope of these assessments included analysis of BLUFOR & OPFOR:

- sources of Tables of Organization & Equipment
- sources of doctrine
- units by type
- weapon systems and equipment by type, echelon and capabilities
- Combat Instruction Sets (CISs) or unit behaviors

3.1.4 Simulated Entities. That the clarity, fidelity, complexity, and level of detail of simulated entities are sufficient for their intended use.

For purposes of this assessment entity refers to each simulated vehicle, simulated item of equipment or simulated individual soldier. For each entity the visual model(s) were evaluated with respect to clarity, fidelity, complexity and levels of detail over different ranges. Where appropriate, the entity subsystem models were assessed as well as any simulated representation of human actions, reactions and interactions.

3.1.5 PDU Exchange. That the CCTT will exchange Protocol Data Units (PDU) with the required timing, accuracy, and fidelity (1) between mobile CCTT sites and (2) between mobile CCTT sites and fixed CCTT sites.

The assessment of the exchange between CCTT mobile sites and between mobile CCTT sites and fixed CCTT sites was required to ensure internal consistency of the exchange of data/information/timing to maintain coherence of the simulation regardless of the physical configuration. It was sufficient to run the system in each configuration and ensure that the exercises maintained a sufficient level of coherence.

3.1.6 Data Items Exchange. That the data items being exchanged are accurate and Distributed Interactive Simulation (DIS) interoperable across components.

A necessary and sufficient condition to meet this criterion was the certification by the appropriate agent, STRICOM, that the CCTT is DIS compliant. See Annex G.

3.1.7 System Support. That the system documentation and contractor logistics support are adequate.

The scope of the assessment of system support for the CCTT focused on the Contractor Logistics Support (CLS) contract and the extent of delivered system documentation. The CLS contract must be in place and funded. The level of CLS support must be sufficient to support required unit orientation training and anticipated unit training throughput. This contract must also provide flexibility in a manner that allows for changing requirements as force structure and training strategies evolve. The assessment included the extent to which the CLS provides for the data collection, analysis and reporting of information to assist the government in maintaining cognizance of the system reliability and maintainability. Finally the assessment determined the extent to which the system documentation is done in accordance with regulatory guidance.

3.1.8 Configuration Management. That configuration management is in effect and responsive to anticipated needs of the users.

The scope of the assessment of system Configuration Management (CM) focused on the evaluation of the plan to determine if:

- a funded executable plan is in place
- the organizational structure for CM ensures representation of the user, contractor, and material developer

- the CM plan is responsive to anticipated needs of the user to include provisions for the transition of configuration management control from the developer to the user

3.1.9 Training Support. That CCTT provides adequate Comprehensive Training Support Packages to train MTP tasks at the platoon and company/team/troop level.

The assessment of the training support for CCTT is based on the recent changes to the system requirements document. Training support products for CCTT will be examined to determine the extent to which the functionality of each of the four critical components will be delivered with the system. The four critical components of a CCTT Comprehensive Training Support package include:

- system orientation and trainer unique system training
- Train-the-Trainer products that teach how to exploit the system's capabilities
- training exercise management and development tools
- a base library of TRADOC approved structured exercises and training scenarios

Due to the recent addition of this requirement to the program, it is not expected that all portions of this will be complete. However, each was assessed to determine availability, adequacy, funding and/or anticipated delivery.

3.1.10 Negative Training. That the use of CCTT does not internalize actions, cognitive processes, or procedures in the performance of tasks that must be untrained when executed in the live environment.

This definition of negative training is used to ensure that one does not equate a physical or representational difference between the simulation and the real world as a negative training environment. With this definition in mind, the information provided through interviews, surveys and other soldier/leader feedback during the Preproduction Qualification Testing, the Limited User Test and the Initial Operational Test and Evaluation will be used to identify potential problems. TRADOC SMEs examined the results of these tests in detail to determine if problems exist and their potential impact.

3.1.11 Training Uses. That CCTT provides an adequate training environment to train MTP tasks at the platoon and company/team/troop level

CCTT is required to support the training of tasks found in the close combat heavy MTPs:

- ARTEP 17-237-10 MTP, Tank Platoon
- ARTEPs 7-3/4 MTP & 7-8 MTP, Mechanized Infantry Platoon/Squad
- ARTEP 71-1 MTP, Tank/Mechanized Infantry Team
- ARTEP 17-57-10 MTP, Scout Platoon
- ARTEP 17-487-30 MTP, Regimental Armored Cavalry Troop

This assessment was conducted IAW the training uses assessment methodology described in Annex A. The intent was to accredit CCTT by MTP task and then provide a relative rank or classification of the degree to which CCTT supports (cues, responses, feedback) the training of each task. This method was predicated on having completed the assessment of all other acceptability criteria. This ensured that those SMEs assessing the extent to which CCTT provides the cues, responses and feedback associated with MTP task performance measures have all of the available data. This method also requires that the weighting of task-steps (based on the extent to which trainers intend to train that task step in a virtual environment) be done by the USAARMC and USAIC doctrine and/or training personnel and be kept separate from the system capability assessment. Given the criteria for weighting used in this assessment, a relative ranking of CCTT's support to train MTP tasks will result. However, these weighting criteria do not support the more difficult assessment of the veracity of CCTT as a training environment versus some other training environment.

3.2 Acceptability Criteria Ratings. Upon completion of the detailed analysis of the system test reports, other documentation and the V&Vreports, the accreditation team rated each of the system requirements and the acceptability criteria. In most cases, the rating for an acceptability criteria is based on the subjective aggregation of ratings from one or more data forms. Therefore, a criterion may be rated "acceptable" or "acceptable with risk" even though one of the supporting forms may contain a rating of "need data" or "unacceptable" for a specific item. Form 4-13 provides the rollup assessment for each of the acceptability criteria.

FORM 4-13 Rating of Acceptability Criteria

A= Acceptable AR= Acceptable with risk U= Unacceptable

Acceptability Criteria	Sources	Rating
1. All required data values are well defined and data sources for obtaining required data have been identified and used. (Data Values & Sources)	Form 4-1 Thru Form 4-10 V&V,PIDS,PPQT	AR[1]
2. Algorithms, terrain, and environment representations are functionally adequate to support the required use of the system. (Algorithms, Terrain, & Environment)	Form 4-1 Thru Form 4-10 LUT & IOTE, CIS V&V,PIDS,PPQT	A
3. Levels of BLUFOR and OPFOR force structure and integration have the required fidelity and resolution. (BLUFOR & OPFOR)	Form 4-1 Thru Form 4-10 LUT & IOTE, CIS V&V,PIDS,PPQT	A
4. Clarity, fidelity, complexity, and level of detail of the simulated entities are sufficient for their intended use. (Simulated Entities)	Form 4-1 thru Form 4-10 LUT & IOTE V&V,PIDS,PPQT	A
5. CCTT will exchange PDUs with the required timing, accuracy, and fidelity (1) between mobile CCTT sites and (2) between mobile CCTT sites and fixed CCTT sites. (PDU Exchange)	Form 4-1 thru Form 4-10 LUT& IOTE V&V,PIDS,PPQT	A
6. Data items being exchanged are accurate and DIS interoperable across components. (Data Items Exchange)	Form 4-1 thru Form 4-10 LUT & IOTE V&V,PIDS,PPQT	AR[2]
7. System documentation and contractor logistics support. Are adequate. (System Support)	Form 4-10 LUT & IOTE Contractor Doc Govt Doc	A
8. Configuration management is in effect and responsive to anticipated needs of the users. (Configuration Management)	Govt Doc	A
9. CCTT provides adequate Comprehensive Training Support Packages to train MTP tasks at the platoon and company/team/troop level. (Training Support)	Form 4-10 LUT & IOTE STRUCCTT	AR[3]
10. CCTT does not internalize actions, cognitive processes, or procedures in the performance of tasks that must be untrained when executed in the live environment. (Negative Training)	Form 4-1 thru Form 4-10 LUT & IOTE CIS	A
11. CCTT provides adequate training environment to train MTP tasks at the platoon and company/team/troop level. (Training Uses)	Training Uses Assessment	AR

Form 4-13 footnotes:

1: The data for indirect fire and mine vulnerability do not adequately represent real world effects. Classified data cannot be used. TRADOC is working to develop acceptable data and will provide this data to AMSAA for comment. This new data will be implemented into CCTT as a part of the Post Production Software Support (PPSS) effort.

2: CCTT is certified as DIS compliant. However, CCTT implemented a multicast network approach. This footnote is intended as a flag to those intending to interoperate with CCTT; they will need to take this into consideration.

3: A baseline set of structured training scenarios and a CLS process for modifying them to support unit requirements is in place. The Commander's Integrated Training Tool development effort is underway and fully funded. It will be in place by 1st QTR, FY00.

3.3 Detailed Assessments.

Forms 4-1 through 4-11 come from the CCTT Accreditation Plan and provide the detailed ratings of CCTT system requirements and capabilities as defined in a very general sense in the CCTT requirements document. The V&V reports, CCTT test data, government documents and SME information provided the data sources for the detailed requirements and these assessments. A brief description of the form and its purpose will precede each completed assessment.

3.3 Detailed Assessments.

3.3.1 Form 4-1 Manned Modules, Dismounted Infantry Module, and Semi-Automated Force Ratings.

Form 4-1 focuses on the accuracy and adequacy of the replication of the capabilities and physical performance of weapon systems, vehicles and dismounted soldiers in the simulation. Specifically, each manned simulator, the DIM and the SAF/CGF are assessed, as applicable, with respect to form, fit and function; capability; vulnerability; and reliability.

FORM 4-1 Rating of Manned Modules, DIM and SAF/CGF

A= Acceptable AR= Acceptable with risk U= Unacceptable ND= Need Data

Primary Source: V & V Documentation

	M1A1/2	M2/3A2	FISTV	M113A3	HMMWV	DIM	SAF/CGF
Form, Fit, & Function							
* Mod Compartment Tolerances	A/A	AR[22]	AR[23]	A	A	-	-
* Dimensional Characteristics	A/A	A	A	A	A	-	-
* Component Placement	A	A	A[21]	A	A	-	-
* Sounds	A	A	A	A	A	-	-
* Communications	A	A	A	A	A	A	A
* Hardware Functionality	A	A	A	A	A	AR[29]	-
Target Acquisition							
* Probability of Detection	AR[1]	AR[1]	AR[1]	AR[1]	AR[1]	AR[1]	A
* Probability of Recognition	AR[1]	AR[1]	AR[1]	AR[1]	AR[1]	AR[1]	A
* Probability of Identification	AR[1]	AR[1]	AR[1]	AR[1]	AR[1]	AR[1]	A
* Acquire Parameters Comparison	AR[1]	AR[1]	AR[1]	AR[1]	AR[1]	AR[1]	AR[1]
* DISSTAF Comparison	AR[1]	AR[1]	AR[1]	AR[1]	AR[1]	AR[1]	-
* Average Detection Time	AR[1]	AR[1]	AR[1]	AR[1]	AR[1]	AR[1]	A
Delivery Accuracy							
* Probability of Hit vs Range	AR[2]	AR[2]	A	A	A	A	A
* Flight Trajectory & Time of Flight	A	A	A	A	A	A	A
* Total Dispersion vs Aimpoint	A	A	A	A	A	A	A
Rate of Aimed Fire							
* First Round Firing Times	-	-	-	-	-	AR[4]	AR[4]
* Subsequent Round Firing Times	-	-	-	-	-	AR[4]	AR[4]
* Load Time	A	A	A	A	A	A	AR[4]

	M1A1/2	M2A2/3	FISTV	M113A3	HMMWV	DIM	SAF/CGF
Weapons Characteristics							
* Max/Min Range	AR[5]	AR[5,6]	AR[5]	AR[5]	AR[5]	AR[5]	AR[20]
* Max Effective Range	AR[5]	AR[5]	AR[5]	AR[5]	AR[5]	AR[5]	A
* Ammo Storage & Expenditure	A	A	A	A	AR[7]	A	A
* MG Sustained Rate of Fire	A[30]	A[30]	AR[7]	AR[7]	AR[7]	AR[7]	A[30]
* MG Cyclic Rate of Fire	A[30]	A[30]	A	A	A	A	A[30]
Vulnerability							
* P(Kill/Hit) - Direct Fire	A	AR[26]	ND[26]	ND[26]	ND[26]	A	A
* P(Kill/Hit) - Indirect Fire	AR[27]	AR[27]	AR[27]	AR[27]	AR[27]	AR[27]	AR[27]
* P(Kill/Hit) Mines	A	A	A	A	A	A	A
* P(KIA,), P(WIA) for Personnel	AR[31]	AR[31]					-
Mobility							
* Acceleration	A	AR[9,25]	A	A	A	-	A
* Max Cross Country Speed	A	AR[9,25]	A	A	A	A	A
* Vehicle Braking	A	AR[9,25]	AR[9]	A	A	-	ND
* Fuel Consumption	A	AR[10,25]	A[11]	A	A[12]	-	ND
Combat Damage & Repair							
* Average Repair Time	A	A	A	A	A	-	A
* Level of Repair	A	A	A	A	A	-	A
* Components Damaged	AR[13]	AR[13]	AR[13]	AR[13]	AR[13]	-	A
* Damage Symptoms	U[14]	A	A	A	A	-	A
Stochastic Reliability							
* Mean Usage between Failures	A	A	A	A	A	-	A
* Average Repair Time	A	A	A	AR	A	-	A
* Performance Degradation	U[16]	A	A	A	A	-	A
Deterministic Reliability							
* Obstacle Negotiation	A	A	A	A	A	-	-
* Steering/Turning	A	A	A	A	A	-	-
* Firepower-related Reliability	A[17]	A[17]	A[17]	A[17]	A[17]	A	-
* Performance Degradation	A	A	A	A	A	-	-

Form 4-1 footnotes:

1: Due to funding and time constraints this assessment was not conducted to any level of statistical significance or in the detailed manner desired by AMSAA. A team of SMEs

representing each of the proponents, the Threat Support Directorate, TECOM and the TSM conducted the test. This modified test used a sample set of models, all types of simulated sighting systems, a set of ranges and varying environmental conditions. The system demonstrated to the team's satisfaction, consensus voting, that models adequately represent the actual vehicles, model sizes are accurately represented at range, sighting systems provide consistency of presentation and the potential to acquire targets appears consistent with the real systems. Where problems were found these were entered into the Problem Trouble Report (PTR) system. It was noted that the reticles of many sighting systems are not as clear as or the exact size of the actual sights. This problem is being rectified in the PPSS and production by adding a special symbology card to all weapon sights. An additional risk in this assessment is the lack of assessment of the P1 (temperate) terrain database. TRADOC will assess this database during FOT&E in Mar '00 at Ft Benning.

2: The AMSAA testing revealed that in the moving target/moving weapon system situation the P_h values are not correct.

3: Deleted

4: No results from AMSAA testing. PM provided implementation detail that reflects a quality implementation. However, not tested by outside agency.

5: Probability of hit requirement is met via delivery accuracy data; therefore, by extrapolation, weapon min/max ranges and max effective ranges are acceptable with risk.

6: TOW missile flies beyond maximum range instead of going to ground.

7: PTR 18670 addressed the representation of the machine gun barrel overheating and causing a failure. PTR has been fixed and will be fielded in version 7.0.

8: Deleted

9: The V&V test data reveals that the system is outside required limits. However, the difference was not noted by any users during operational testing and therefore will be added to the list of minor problems that need correction. PTR # 147 has been opened.

10: CCTT M2 underestimates fuel consumption, which can impact continuous operations training and training focused on logistics operations. Cannot fix until transmission model is corrected.

11: CCTT FISTV underestimates fuel consumption when under 30 mph, which can impact continuous operations training and training focused on logistics operations. PTR #524 has corrected the problem.

12: CCTT HMMWV underestimates fuel consumption when under 40 mph, which can impact continuous operations training and training focused on logistics operations. PTR #529 has been completed.

13: Implemented components damaged list is an aggregated list provided by TRADOC vice the more detailed list provided by AMSAA. This method was used due to host computer limitations. AMSAA assisted in development of the revised mapping.

14: Main gun does not fail when failure induced.

15: Deleted

16: Main gun does not fail when failure induced.

17: Machine gun barrel life is too long. PTRs 20206 and 20210 have been completed.

18: Deleted

19: Deleted

20: The rules of engagement for the OPFOR do not account for all possible situations and relative values of targets. This could result in poor selection of targets. Some OPFOR anti-tank weapons are artificially limited to a range of 4000m as this is the visual range of the manned simulators. Eliminating this artificiality will result in an OPFOR that can engage outside the simulated visual range of the training audience and adversely effect training.

21: Turret orientation of FISTV manned module targeting station was faced forward, while in the actual vehicle it faces backward. This was an initial concern for soldiers but does not effect performance during the training – acceptability was validated by USAFAS. Expect the FIST-V to be superceded by the BFIST.

22: The manual turret traverse handle is improperly placed. This fault will be fixed in production and all existing simulators will be modified.

23: Measurements revealed significant variances in location of controls. This will be fixed in production QC. Of note is that the measurement of real vehicles also revealed significant variances in location of controls.

24: Deleted.

25: Lack of an official M2 transmission model, until recently, prevents performance of the M2 to specifications. New model now on hand and will take up to nine months to implement.

26: Revised TSM-approved direct fire data for BFV has been received from AMSAA and is being implemented.

27: Not tested by outside agency waiting info on how data is now implemented. Indirect Fire vulnerability was implemented IAW the 1996 AMSAA Compendium of Algorithms; however, users have questioned the effects of the implementation in the CCTT virtual environment. Investigation is ongoing into the data and algorithm implementations that may cause these inappropriate effects.

28: No testing of SAFOR braking and fuel consumption.

29: The DIM interface is universally accepted as inadequate; funded actions are ongoing to correct the problem.

30: Not specifically tested; however, extensive use during and after IOT&E by many SMEs resulted in no adverse comments.

31: Personnel vulnerability to indirect fire appears less than expected; investigation underway.

3.3.2 Form 4-2 Operations Center (OC) Workstations.

Form 4-2 focuses on the accuracy and adequacy of the replication of the capabilities and physical performance of weapon systems, vehicles and battle command systems provided by the OC workstations:

- Combat Trains Command Post (CTCP)
- Unit Maintenance Collection Point (UMCP)
- Combat Engineer Station (CES)
- Field Artillery Battalion TOC (FABTOC)
- Fire Support Element (FSE)
- Fire Direction Center (FDC)
- Tactical Air Control Party (TACP)

FORM 4-2 Rating of Operations Center (OC) Workstations

A= Acceptable AR= Acceptable with risk U= Unacceptable ND= Need Data

Primary Source: V & V Documentation

	CTCP	UMCP	CES	FABTOC	FSE	FDC	TACP
Mandatory Procedure Transparency							
* Reporting	AR[1]	AR[1]	AR[3]	AR[1]	AR[1]	AR[1]	-
Vehicle Movement Parameters							
* Max Speed	A	A	A	A	A	A	-
* Max Grade (Slope)	A	A	A	A	A	A	-
* Fuel Capacity	A	A	A	A	A	A	-
* Cruising Range	AR[2]	AR[2]	AR[2]	AR[3]	AR[3]	AR[3]	-
* Non-idle Fuel Consumption	AR[2]	AR[2]	AR[2]	AR[3]	AR[3]	AR[3]	-
* Gross Vehicle Weight	AR[2]	AR[2]	AR[2]	A	A	A	-
* Maximum Cargo Weight	AR[2]	AR[2]	AR[2]	A	A	A	-
Vulnerability							
* Mines	A	A	A	A	A	A	
* Direct Fire	A	A	A	A	A	A	
* Indirect Fire	A	A	A	A	A	A	
Simulated Reliability and Maintainability							
* Reliability	A	A	A	A	A	A	
* Maintainability	A	A	A	A	A	A	
* Simulated resupply Transfer							
* Ammunition	A	A	A	A	A	A	
* Fuel	AR[4]	-	-	-	-	-	
Simulated C3							
* Simulated SINCGARS	A	A	A	A	A	A	A
* Digital Communications	A	A	A	A	A[5]	A[5]	A
* Command & Control	A	A	A	A	A	A	A
Simulated Battle Damage Assessment (BDA), Repairs, and Recovery							
* BDA	-	A	-	-	-	-	-
* Repair	-	AR[6]	-	-	-	-	-
* Recovery	--	A[7]	-	-	-	-	-
Simulated Combat Engineering							
* Mobility	-	-	A	-	-	-	-
* Countermobility	-	-	A	-	-	-	-
* Survivability	-	-	A	-	-	-	-

FORM 4-2 Rating of Operations Center (OC) Workstations

A= Acceptable AR= Acceptable with risk U= Unacceptable ND= Need Data

Primary Source: V & V Documentation

	CTCP	UMCP	CES	FABTOC	FSE	FDC	TACP
Ballistics							
* SP Howitzers (155)	-	-	-	AR[9]	AR[9]	-	-
* Mortars (120)	-	-	-	-	-	AR[9]	-
Fire Support							
* Close Air Support (CAS)	-	-	-	-	-	-	A[10]
* AFATDS	-	-	-	A	A	-	-
* Artillery	-	-	-	A	A	-	-
* Mortars	-	-	-	-	-	AR[11]	-

Form 4-2 footnotes:

1: Not all aspects fully tested but where tested were acceptable.

2: Inappropriate vehicle mapping and inconsistent vehicle data resulting in wide variances from the 15% tolerance levels (e.g. M1091 5-ton tanker modeled as HMMWV, yet not given HMMWV data such as 450 liters versus 495 actual and gross vehicle weight of 20K kgs versus 3496 kgs.)

3: M577 fuel consumption and associated cruising range varies significantly from 15% tolerance. Fault is due to vehicle mapping scheme and will be corrected if a higher fidelity mapping scheme is adopted.

4: Fuel transfer rates from prestocks are correct however, the transfer rates between vehicles are not within desired tolerances: PTR 17969

5: TRADOC decided not to implement the Mortar Ballistic Computer (MBC) as it is being replaced by the improved version. Therefore, mortar crews must perform operations manually. The new version will be implemented as a part of the Pre-Planned Product Improvements. The CCTT XXI FBCB2 effort is scheduled to integrate the real IMBC into CCTT in late 1999.

6: Repair time algorithm for SAF vehicles is incorrect .

7: Wrong tow truck for heavy broken vehicles. PTR 19424

8: Deleted; the new data developed by USAEC has been incorporated.

9: Unable to compare with the real data. USAFAS is working with the TSM to identify the real data to ensure an accurate assessment.

10: The data for close air support weapon ballistics, accuracy and effects cannot be validated as of yet due to lack of comparison data.

11: No MBC. The system does not permit a one-gun adjustment mission. FBCB2 effort is scheduled to integrate the real IMBC into CCTT in late 1999."

3.3.3 Form 4-3 CCTT System.

Form 4-3 focuses on the extent to which the CCTT, as a system, meets the capabilities specified in the requirements document.

FORM 4-3 Rating of CCTT as a System

A= Acceptable AR= Acceptable with risk U= Unacceptable ND= Need Data

From TDR (para 5,a,h,i,j and para 6,7,9)	Rating
a. System Requirements	
• Provide interactive networking of vehicle simulators,C3, and workstations that represent vehicles and support functions of:	
BN/TF	A
Co/TM/Troop	A
Plt	A
CS and CSS elements	A
• Operable by military personnel normally found in unit being trained.	A
• Allow initialization, reinitialization, reconstitution, and activation of vehicles into the simulation—individually and in units.	A
• Designed so that military personnel (training audience) can initialize and operate the system within three attempts after training.	ND
• Allow for up to five separate unit operations simultaneously.	A
• Contain Built in Test Equipment (BITE).	A
• Modular in design and allow for product improvements.	A
h, i. Mobile and fixed platoon sites	
• Fixed Site-Bn TF size (1-150 simulators w/ support stations)	A[1]
Co/Tm size (1-50 simulators w/ support stations)	A
Plt size (4 or 7 simulators w/ collocated support stations)	A
• Mobile Site-Plt size (4 or 7 simulators w/collocated support stations)	A
• Each workstation group below can be operated by one individual:	
(1) CSS, Logistics, and Maintenance terminals	A
(2) Indirect Fire Support, CAS, and mortar	A
(3) AAR and next higher HQ	A
(4) Engineer	A
(5) SAFOR	A
j. Logistics and Readiness	
Complete 90% of platoon and 90% Co/Tm training without system abort.	A

FORM 4-3 Rating of CCTT as a System (Con't)

A= Acceptable AR= Acceptable with risk U= Unacceptable ND= Need Data

From TDR (para 7 & 9)	Rating
7. System Support:	
• Government owned, contractor operated, contractor logistic supported (CLS) operations.	
CLS will cover:	
Scheduled Training Uses	A
Operational Availability	AR[2]
Admin Reporting Requirements (e.g. usage)	A
Personnel Requirements	A
Unit Orientation	A
Maintenance	
- Facility	A
- Hardware	A
System Data Collection/Analysis (e.g. failure analysis)	
- Reliability	A
- Maintainability	A
Software Support	A
Supply Support	A
Provide Technical Support	A
Provide Technical Publications	A
• Mobile version transportation requirements will be part of CLS.	A
9. Standardization and Interoperability	
Accommodate a standardized network design to allow simulators of various services, countries, and types to be integrated onto one simulated battlefield.	AR[3]

Form 4-3 footnotes:

1: System in current configuration supports BN/TF training in command field exercise mode.

2: A risk exists with the CLS contract. One hour of "down time" can occur before "down time" is chargeable to the CLS contractor – this is unacceptable. Loss of a simulator for an hour during a platoon exercise may result in a crew missing the entire exercise without visibility to the PM or the using unit's operations office. We need to have visibility of any simulator or OC Workstation that is down for more than ½ hour.

3: Uses standard FDDI network and is certified as DIS compliant; however, network protocol is IEEE 1278.1 with modifications to support multicasting. This will require other systems to support multicasting or the introduction of a translator between networks.

3.3.4 Form 4-4 CCTT Vehicle Simulators.

Form 4-4 focuses on the extent to which the system simulators meet the capabilities specified in the requirements document.

FORM 4-4 Rating of CCTT Vehicle Simulators

A= Acceptable AR= Acceptable with risk U= Unacceptable ND= Need Data

From TDR (para 5,b)	Rating
b. Vehicle Simulator Modules	
(1) Soldiers must be able to identify the following simulated vehicles by bumper number or vehicle marking system: M1A1, M1A2, M2A2, M3A2, M113A3, and M981 (FIST-V).	A
(2) Must represent appearance and functional aspects of crew compartments they simulate.	AR[1]
(3) Must represent cues associated with actual vehicles. • aural • visual • tactile sensations • Speeds and maneuverability must be consistent with profile of simulated terrain.	 • AR[1] • AR[1] • A • AR[3]
(4) Weapon systems must exhibit characteristics of actual weapons. Primary and secondary fire control systems must be replicated.	A[2]
(5) Must represent correct vehicle and weapon operation, movement, and orientation.	AR[3]
(6) Must have vision blocks, sighting systems, and sensors that replicate those on actual vehicles. All objects and terrain must appear in proper size and resolution.	A
(7) Must replicate SINCGARS (to include terrain and distance impacts) and allow use of CVC helmet.	A
(8) Must provide deterministic and stochastic failures as well as battle damage. Must replicate realistic consumption rates • Fuel • Ammunition Must respond to simulated resupply functions • Rearm • Refuel	 • A[4] • A • A • AR[5]

FORM 4-4 Rating of CCTT Vehicle Simulators

A= Acceptable AR= Acceptable with risk U= Unacceptable ND= Need Data

From TDR (para 5,b)	Rating
(9) Provide inside dimension to allow all crew members to operate at any level MOPP.	A
(10) Provide a compass capability depicting long axis of vehicle.	A
(11) Provide a vehicle with operational characteristics of the HMMWV.	A
(12) Provide a panoramic FOV representing open or popped hatch.	A

Form 4-4 footnotes:

1: M2A2 ISU housing unit is too large in visual display; blocks TC vision more than in the real vehicle.

2: HMMWV does not provide the MK19 weapon system.

3: Inability to implement an accurate model of the M2 series transmission results in an M2 that does not provide exact replication of the actual vehicle acceleration/deceleration performance.

4: Trucks & M577A2 fuel consumption and cruise range vary significantly from 15% tolerances.

5: Fuel transfer rate from prestocks are accurate however transfer rates between vehicles are out of tolerance: PTR 17969

3.3.5 Form 4-5 Terrain and Environment.

Form 4-5 focuses on the extent to which the system provides simulated terrain and environmental characteristics as specified in the requirements document.

FORM 4-5 Rating of Terrain and Environment

A= Acceptable AR= Acceptable with risk U= Unacceptable ND= Need Data

From TDR (para 5,c)	Rating
c. Provide simulated terrain and environment for conduct of military operations.	
(1) Provide terrain area of 50 by 75 km with active radius of 3500 m around each simulated vehicle.	A
(2) Simulate temperate and desert terrain. Display topographic features to allow 95% of users to recognize them.	ND[1]
(3) Support use of terrain for cover and concealment.	A
(4) Provide UTM map representations of simulated terrain at 1:50,000.	A
(5) Provide means to modify and add to existing terrain data bases.	U[2]
(6) Provide day and night visibility and effects of obscurants.	A

Form 4-5 footnotes:

1: Waiting delivery and evaluation of final P1 database.

2: PPSS team does not have software and hardware necessary to execute this capability.

3.3.6 Form 4-6 Dismounted Personnel.

Form 4-6 focuses on the extent to which the system provides simulated dismounted personnel and supports the training of dismounted leaders as specified in the requirements document.

FORM 4-6 Rating of Dismounted Personnel **A= Acceptable AR= Acceptable with risk U= Unacceptable ND= Need Data**	
From TDR (para 5,d)	**Rating**
d. Dismounted Personnel (Infantry and Scouts)	
Simulate dismounted soldiers to perform the following: • reconnaissance • scan 360 degrees • engage targets with weapons • move in formations • interact and communicate with other soldiers • dismount and remount their vehicles.	 • A • A • A • A • A • A
(2) Provide capability to control the following: • position • rate of movement • rates of fire • targets they engage View as seen by dismounted soldiers must be same as if in the position of the dismounted soldier. Must include following FOV: • normal • binocular • night vision goggle	 • A • A • A • A • A • A • A
(3) Mounted crews must be able to identify dismounted soldiers and dismounted soldiers must be able to identify their vehicles.	A
(4) Must portray dismounted soldiers as teams armed with following weapons: • M16A2 • M60 MG • M249 SAW • AAWS-M • AT4 MPIM • M203 Grenade Launcher	 • A • A • A • A • A • A
(5) Provide capability to replenish ammunition from a vehicle.	A

3.3.7 Form 4-7 Command and Control, Combat Support, Combat Service Support

Form 4-7 focuses on the extent to which the system provides C^2, CS and CSS vehicles, systems and capabilities as specified in the requirements document.

FORM 4-7 Rating of C&C, CS, and CSS

A= Acceptable AR= Acceptable with risk U= Unacceptable ND= Need Data

From TDR (para 5,e)	Rating
e. C&C, Combat Support, and Combat Service Support	
(1) Must simulate TOC by mock-up of two M577A2 vehicles.	A
(2) Must simulate CTCP by mock-up of one M577A2 vehicle.	A
(3) Provide capability to emplace following support vehicles so they are visible, vulnerable, and function normally:	
• HEMTT	• AR[1]
• M577A2/C2V	• A
• M113A3	• A
• M1064 mortar	• A
• M109A6	• A
• M728 CEV	• A
• M9	• A
• HAB/AVLB	• A
• HMMWV	• A
• M88A2	• A
• LMTV	• A
• MTV	• A
• M270 MLRS	• A
(4) Provide capability to control vehicles and functions.	A
(5) Allow prepositioning and dispensing at designated locations.	A
(6) Simulate and control a UMCP represented as a HMMWV.	A
(7) Provide for personnel support functions with S1/4 in CTCP.	A
(8) Provide for interaction of C&C, and support functions of higher HQ.	A

FORM 4-7 Rating of C&C, CS, and CSS

A= Acceptable AR= Acceptable with risk U= Unacceptable ND= Need Data

From TDR (para 5,b)	Rating
(9) Provide indirect fire support as follows: • FSE in M577A2 collocated with TOC. • FABTOC to control 155 Bn and MLRS Battery. • FDC for mortar platoon in M577A2. • Weapons effects must be visible and audible to soldiers	 • A • A • AR[2] • A
(10) Simulate the TACP with HMMWV. Must be able to control A10, and F16 aircraft.	A
(11) Provide engineer work station collocated with TOC. System must simulate normal engineer functions and be governed by appropriate time constraints.	A

Form 4-7 footnotes:

1: Fuel transfer rate from prestocks are accurate however transfer rates between vehicles are out of tolerance: PTR 17969

2: MBC not implemented due to changes in fielded equipment, requires manual computation of firing data.

3.3.8 Form 4-8 Exercise Workstations and After Action Review System

Form 4-8 focuses on the extent to which the system provides workstations with capabilities as specified in the requirements document.

FORM 4-8 Rating of Exercise Workstations and AAR System

A= Acceptable AR= Acceptable with risk U= Unacceptable ND= Need Data

From TDR (para 5,f)	Rating
f. Provide Operations Monitor and AAR capabilities	
(1) Provide means to display, monitor, record, and play back simulation exercise.	A
(2) Provide time stamps to identify significant points of an exercise.	A
(3) Provide display and playback of UTM projection view of the entire operation.	A
(4) Provide for conduct of up to five independent/simultaneous AARs.	A
(5) Provide display and playback of horizontal view up to 300 m above the terrain data base elevation.	A
(6) Provide capability to freeze or stop an exercise for a "during action" review and restart exercise at that point.	A

3.3.9 Form 4-9 Semi-Automated Forces / Computer Generated Forces (SAF/CGF)

Form 4-9 focuses on the extent to which the system provides a SAF/CGF with capabilities as specified in the requirements document.

FORM 4-9 Rating of (SAF/CGF)

A= Acceptable AR= Acceptable with risk U= Unacceptable ND= Need Data

From TDR (para 5,g)	Rating
g. Provide semi-automated forces (SAF/CGF) to perform tasks and functions with minimum human involvement.	
(1) Replicate units, vehicles, and troops.	
• Replicate enemy forces	A
• Battalion	• A
• Company/Team/Troop	• A
• Platoon	• A
• Tanks	• A
• Personnel Carriers	• A
• Command and Control Vehicles	• A
• Reconnaissance vehicles	• A

• Forward Area AD Weapons • Dismounted infantry and their weapons • Replicate friendly forces • Battalion • Company/Team/Troop • Platoon • Tanks • Personnel Carriers • Command and Control Vehicles • Reconnaissance vehicles • Forward Area AD Weapons • Dismounted infantry and their weapons • Forces down to platoon level will be controlled by trained personnel and will be indistinguishable from live forces.	• A • A A • A • A • A • A • A • A • A • A • A • A
(2) Doctrine and Tactics • Must be capable of roles consistent with allied doctrine, tactics, and weapons capabilities. • Must be capable of roles consistent with Threat doctrine, tactics, and weapons capabilities.	• AR[1] • AR[2]
(3) Must interact under control of manned command simulators and move as simulated elements.	AR[3]
(4) Provide SAF/CGF workstation to control: • Adjacent, forward, and rear elements: • Vehicle movements. • Formations. • Weapons employment. • Orientation of friendly SAF/CGF platoon vehicles. • Fire Support consistent with Threat RAG and DAG.	• A • A • A • A • A • AR[4]
(5) Provide for conduct of aviation operations. • Fixed Wing • Rotary Wing • Attack • CAS • Lift/airmobile	• A[5] • A[5] • A[5] • A[5] • A[5]
(6) Provide capability to emplace vehicles in selected positions and execute movement sequences for preplanned exercises. • BLUEFOR • OPFOR	• A • A

Form 4-9 footnotes:

1: All implemented CISs were tested by the Integrated Development Team and passed. 29% have been independently evaluated by a test agency or the STRUCCTT team. SAF algorithms for ammo selection, target selection, and weapon selection do not exhibit adequate tactical realism.

2: All implemented CISs were tested by the Integrated Development Team and passed. 54% have been independently evaluated by a test agency or the STRUCCT team. SAFOR algorithms for ammo selection, target selection, and weapon selection do not exhibit adequate tactical realism. OPFOR SAFOR ATGMs with ranges exceeding 4K are limited to the CCTT 4K visual range.

3: Currently, Command From Simulator (CFS) (i.e., tethering) operates as a function of both manned simulator control and SAF operator intervention. More automation is needed to support larger scenarios.

4: The Regimental Artillery Group is constructed without rocket units; Division Artillery Group not implemented due to entity count constraints. RAG being developed under UK CATT; PTR will be generated to port the software to CCTT.

5: Adequate to support close combat heavy training. Additional tasks required to support aviation and light unit training.

3.3.10 Form 4-10 MANPRINT.

Form 4-10 focuses on the extent to which the system meets the MANPRINT related requirements as specified in the requirements document.

FORM 4-10 Rating of MANPRINT

A= Acceptable AR= Acceptable with risk U= Unacceptable ND= Need Data

From TDR (para 8)	Rating
a. Manpower/Force Structure Assessment • SAF/CGF operators will be required; anticipate these personnel will be civilian contractors.	A
b. Personnel Assessment. • CCTT will not affect accessions into user MOS's. • CCTT must not require a change in the skills and knowledge of effected MOSs'. • CCTT will be maintained and repaired by some form of CLS (Contractor Logistic Support).	• A • A[1] • A
c. Training Assessment • Comprehensive CCTT Training Support Package: ◊ Train-the-Trainer module. ◊ Library of scenarios from co-proponents. ◊ Automated training management system. ◊ Automated exercise authoring tool to build and modify scenarios. • System orientation training must be conducted by contractor and materials left behind as training package for trainers and instructors to use in training units. • CCTT must minimize expenditure of training resources. • CCTT must not cause degradation in individual skill proficiency.	 AR[2] AR[3] AR[2] AR[2] A AR[4] A
d. Human Factors Engineering (HFE) • Operation of software must be user friendly—no more training than listed in c (above) can use it. • CCTT must ensure accurate representation of workspace and operators positions in each vehicle and work environments.	• A • A
e. System Safety. • System must not give off any harmful radiation. • All electrical connections must prevent possibility of electrical shock. • Soldiers must be able to enter and exit simulator and work. station area safely.	• A • A • A

f. Health Hazards Assessment (HHA) • The vehicle simulator modules or system components will not present any health hazards to users, trainers, or operators.	• A

Form 4-10 footnotes:

1: The use of CCTT must be integrated into leader level POIs at proponent schools. Soldiers must be trained on trainer unique aspects of CCTT.

2: The recent addition of the requirements and funding for the comprehensive training support package for CCTT prevented development of this capability with the system. These capabilities are being built under the Commander's Integrated Training Tool (CITT) development effort. The prototype system was beta-tested at Fort Hood and Fort Knox in September 1998. A working prototype will be available for FUE and the final system for analog forces completed in 1st Qtr FY00. The system to support digitized forces will be complete in 1st Qtr FY01.

3: Sufficient baseline of structured scenarios for the desert terrain database. No structured scenarios developed for temperate terrain database. Sufficient procedures are in place to modify these scenarios to meet unit requirements.

4: The Department of the Army has already accepted a 60 mile OPTEMPO tradeoff based on expected effectiveness. Post fielding long term training effectiveness analysis required to fully validate resource tradeoffs and expenditures.

3.3.11 Form 4-11 Post Production Software Support (PPSS).

Form 4-11 focuses on the extent to which the system provides a funded executable PPSS.

FORM 4-11 Rating of Post Production Software Support

A= Acceptable AR= Acceptable with risk U= Unacceptable ND= Need Data

From TDP (para 7)	Rating
Post Production Software Support	
Organization	A
Process	AR[2]
PTR Process	A
Prioritization (PRB & CCB)	A
Configuration Management	AR[1]
Organization	A
Process	A
PTR Process	A
Configuration Control Board	A
Documentation	A

Form 4-11 footnotes:

1: The current document is in draft and should be staffed and co-signed by the PM and TSM as soon as possible.

2: This is a new process that is in place and needs to be assessed overtime to ensure it is adequate for the purpose.

3.3.12 MTP Task-based Training Uses Assessment.

In accordance with the Training Uses Assessment Methodology (ANNEX A) the tasks in each MTP are rank ordered in Figure 3-1 to 3-5 based on a priority that accounts for both the assessments of CCTT to support the execution of the task and provide feedback on task performance. Note that the tasks are in alphabetical order within groups. This is done because it is both inappropriate and misleading to attach any greater significance to the numeric scores than one that allows placement into the general categories of High, Moderate, Minimal and Low for both Execution and Feedback.

For each MTP task the team made an initial assessment to determine if the critical subtasks are supported in any substantive way by CCTT. In those cases where CCTT does not provide any of the primary cues associated with that task the task was summarily assessed as “Not Supported” and the assessment of each sub-task was scored as a zero.

COMPANY TEAM Bands of Potential						
No	**TASKS**		**TTCF-E**	**TTCF-F**	**EXECUTION**	**FEEDBACK**
15	ASSAULT an Enemy Position [Dismounted]	[17-2-0310]	81.3	75.0		
16	ASSAULT an Enemy Position [Mounted]	[17-2-0326]	100.0	92.6		
36	BREACH an Obstacle	[17-2-0501]	93.8	81.3		
57	Change Formation	[71-TT-0001]	80.0	80.0		
1	CONDUCT Fire and Movement	[71-2-0222]	100.0	100.0		
60	Execute Actions Upon Air Attack	[71-TT-0004]	88.9	88.9		
11	PERFORM Actions on Contact	[17-2-0304]	100.0	82.7		
19	PERFORM Ambush	[17-2-0309]	93.1	86.1		
17	PERFORM an Attack by Fire	[17-2-0311]	100.0	94.9	**HIGH**	**HIGH**
10	PERFORM Assault Position Activities	[17-2-0328]	92.3	84.6		
14	PERFORM Attack Position Activities	[17-2-0329]	87.5	87.5		
18	PERFORM Raid [Mounted and Dismounted]	[17-2-0308]	85.3	78.7		
49	PERFORM Service-Station Resupply	[17-2-0703]	88.9	88.9		
4	PERFORM Tactical Road March	[17-2-0302]	98.1	83.3		
48	PERFORM Tailgate Supply	[17-2-0702]	79.2	75.0		
63	React to a Reinforced Obstacle	[71-TT-0007]	97.0	100.0		
62	React to Direct Fire	[71-TT-0006]	100.0	100.0		
51	REORGANIZE on the Objective	[17-2-0706]	78.8	75.8		
9	ASSIST Passage of Lines	[17-2-0327]	93.3	70.0		
28	BREAKOUT from Encirclement	[17-2-0319]	85.7	71.4		
26	DEFEND	[17-2-1021]	81.1	70.0		
44	DEFEND Against Air Attack [Active]	[44-2-C002]	100.0	66.7		
45	DEFEND Against Air Attack [Passive]	[44-2-C001]	75.0	58.3		
30	DELAY	[17-2-0321]	81.8	72.7		
37	EMPLACE an Obstacle	[17-2-0502]	83.3	66.7		
29	INFILTRATE/EXFILTRATE	[17-2-0320]	77.8	66.7	**HIGH**	**MODERATE**
27	LINKUP	[17-2-0318]	87.5	62.5		
21	PERFORM Hasty River/Gap Crossing	[17-2-0332]	80.0	73.3		
8	PERFORM Passage of Lines	[17-2-0303]	91.3	58.0		
5	PERFORM Reconnaissance	[17-2-0202]	100.0	70.8		
22	PERFORM Screen Operations	[17-2-0312]	95.2	71.4		
3	PERFORM Tactical Movement	[17-2-0301]	91.2	73.7		
12	SUPPORT by Fire	[17-2-0306]	100.0	70.8		
32	WITHDRAW Under Enemy Pressure	[17-2-0323]	100.0	72.7		
46	MAINTAIN Operation Security	[17-2-0201]	69.7	78.8	**MODERATE**	**HIGH**
35	EMPLOY Indirect Fire in the Defense	[17-2-0402]	77.8	44.4		
34	EMPLOY Indirect Fire in the Offense	[17-2-0401]	88.9	44.4		
13	OCCUPY Objective Rally Point	[17-2-0307]	83.3	33.3	**HIGH**	**MARGINAL**
47	PERFORM Logistical Planning	[17-2-0701]	100.0	33.3		
56	PREPARE for Combat	[17-2-0101]	90.1	43.2		

No	ARTEP 71-1-MTP Company Team		TTCF-E	TTCF-F	EXECUTION	FEEDBACK
50	CONSOLIDATE on the Objectives	[17-2-0704]	70.4	59.3	MODERATE	MODERATE
59	Execute Actions on Contact	[71-TT-0003]	66.7	66.7		
58	Initiate Action [Left and Right]	[71-TT-0002]	61.1	55.6		
23	PERFORM Guard Operation	[17-2-0330]	73.3	53.3		
33	PERFORM Relief in Place	[17-2-0324]	70.0	73.3		
54	PROVIDE Maintenance Support	[43-2-C003]	58.3	50.0		
61	React to Indirect Fires	[71-TT-0005]	66.7	58.3		
31	WITHDRAW Not Under Enemy Pressure	[17-2-0322]	70.4	63.0		
2	OCCUPY Assembly Area	[17-2-0325]	46.7	24.4	MARGINAL	LOW
43	COORDINATE for Detailed Equip Decontam	[03-2-C033]	0.0	0.0	NOT SUPPORTED	
25	CROSS a Chem/Bio Contaminated Area	[17-2-0313]	0.0	0.0		
24	CROSS a Radiologically Contaminated Area	[17-2-0314]	0.0	0.0		
52	INTEGRATE Replacements	[12-2-C007]	0.0	0.0		
20	PERFORM Air Assault	[17-2-0331]	0.0	0.0		
42	PERFORM Hasty Decontamination	[03-2-C031]	0.0	0.0		
6	PERFORM Local Chemical Reconnaissance	[03-2-C025]	0.0	0.0		
7	PERFORM Local Radiological Reconnaissance	[03-2-C032]	0.0	0.0		
38	PREPARE for a Chemical Attack	[03-2-C013]	0.0	0.0		
39	PREPARE for a Nuclear Attack	[03-2-C015]	0.0	0.0		
55	PROCESS Enemy Prisoners of War [EPWs]	[19-2-C004]	0.0	0.0		
53	PROVIDE Med Evac and Treat of Casualties	[17-2-0705]	0.0	0.0		
40	RESPOND to the Initial Effects of a Nuclear Attack	[03-2-C028]	0.0	0.0		
41	RESPOND to the Residual Effects of a Nuc Attack	[03-2-C030]	0.0	0.0		

ARMORED CAVALRY TROOP Bands of Potential					
No	**TASKS**	**TTCF-E**	**TTCF-F**	**EXECUTION**	**FEEDBACK**
18	TASK: ASSIST PASSAGE OF LINES	92.9	90.5	HIGH	HIGH
20	TASK: CONDUCT HASTY WATER CROSSING OPERATIONS	96.7	90.0		
14	TASK: CONDUCT TACTICAL MOVEMENT	100.0	95.5		
11	TASK: DEFEND IN TROOP SECTOR	97.7	91.2		
10	TASK: DELAY IN TROOP SECTOR	90.9	90.9		
55	TASK: EMPLOY COMMAND AND CONTROL MEASURES	78.9	78.9		
42	TASK: ORGANIZE TROOP COMBAT SERVICE SUPPORT	83.3	79.2		
16	TASK: PERFORM A RELIEF IN PLACE	82.1	76.9		
8	TASK: PERFORM HASTY ATTACK	93.3	76.7		
21	TASK: PERFORM HASTY OBSTACLE BREACHING	87.0	85.5		
6	TASK: PERFORM MOVEMENT TO CONTACT	97.9	95.8		
43	TASK: PERFORM RESUPPLY OPERATIONS	86.7	86.7		
3	TASK: PERFORM ROUTE RECONNAISSANCE	87.8	83.3		
5	TASK: PERFORM SCREEN OPERATIONS	100.0	94.4		
13	TASK: PERFORM TACTICAL ROAD MARCH)	90.2	75.5		
4	TASK: PERFORM ZONE RECONNAISSANCE	96.5	84.2		
12	TASK: DEFEND A BATTLE POSITION	81.5	70.4	HIGH	MODERATE
39	TASK: DEVELOP AIR DEFENSE PLAN	86.7	66.7		
41	TASK: DEVELOP CSS PLAN	100.0	66.7		
52	TASK: ESTABLISH AND MAINTAIN COMMUNICATIONS	100.0	66.7		
7	TASK: PERFORM ACTIONS ON CONTACT	86.7	66.7		
17	TASK: PERFORM PASSAGE OF LINES	92.9	58.3		
53	TASK: REPORT COMBAT INFORMATION	100.0	69.2		
38	TASK: TAKE ACTIVE AD MEASURES AGAINST HOSTILE AIRCRAFT	100.0	58.3		
40	TASK: USE PASSIVE AIR DEFENSE MEASURES	100.0	66.7		
9	TASK: DEVELOP DIRECT FIRE PLAN	93.9	33.3	HIGH	MARGINAL
22	TASK: DEVELOP OBSTACLE PLAN	100.0	44.4		
54	TASK: PASS COMBAT INFORMATION AND ORDERS	100.0	46.0		
50	TASK: PERFORM COMBAT PLANNING	100.0	36.7		
19	TASK: DEVELOP FIRE SUPPORT PLAN	93.3	20.0	HIGH	LOW
15	TASK: OCCUPY AN ASSEMBLY AREA	57.4	37.0	MODERATE	MARGINAL
51	TASK: OPERATE THE TROOP COMMAND POST	60.0	40.0		
46	TASK: CARE FOR CONTAMINATED CASUALTIES	0.0	0.0	NOT SUPPORTED	
32	TASK: CONDUCT A CHEMICAL SURVEY	0.0	0.0		
26	TASK: CONDUCT A RADIOLOGICAL SURVEY	0.0	0.0		
33	TASK: COORDINATE FOR DETAILED EQUIP DECONTAMINATION	0.0	0.0		
31	TASK: CROSS A CHEMICALLY CONTAMINATED AREA	0.0	0.0		
25	TASK: CROSS A RADIOLOGICALLY CONTAMINATED AREA	0.0	0.0		
2	TASK: EMPLOY OPSEC	0.0	0.0		
49	TASK: EXECUTE SLEEP PLAN	0.0	0.0		
47	TASK: MAINTAIN TROOP STRENGTH	0.0	0.0		
34	TASK: PERFORM DETAILED TROOP DECONTAMINATION	0.0	0.0		
37	TASK: PERFORM HASTY DECONTAMINATION	0.0	0.0		
44	TASK: PERFORM MEDICAL TREATMENT AND EVACUATION	0.0	0.0		
48	TASK: PERFORM PRECOMBAT INSPECTION	0.0	0.0		
28	TASK: PERFORM RADIOLOGICAL DECONTAMINATION	0.0	0.0		
45	TASK: PERFORM TROOP MAINTENANCE OPERATIONS	0.0	0.0		
29	TASK: PREPARE FOR A CHEMICAL ATTACK	0.0	0.0		
27	TASK: PREPARE FOR A FRIENDLY NUCLEAR STRIKE	0.0	0.0		
24	TASK: PREPARE FOR A NUCLEAR ATTACK	0.0	0.0		
23	TASK: PREPARE FOR OPERATIONS IN AN NBC ENVIRONMENT	0.0	0.0		
1	TASK: PROCESS ENEMY PERSONNEL AND EQUIPMENT	0.0	0.0		
35	TASK: PROTECT SUPPLIES AND EQUIP FROM CONTAMINATION	0.0	0.0		
30	TASK: RESPOND TO A CHEMICAL AGENT ATTACK	0.0	0.0		
36	TASK: RESPOND TO THE RESIDUAL EFFECTS OF A NUC ATTACK	0.0	0.0		

MECHANIZED INFANTRY PLATOON Bands of Potential						
No	TASKS		TTCF-E	TTCF-E	EXECUTION	FEEDBACK
24	Break Contact	7-3/4-1111	83.3	77.8	HIGH	HIGH
46	Defend Against Air Attack	7-3/4-1301	94.7	78.9		
33	Employ Direct Fire Support	7-3-4201	100.0	80.0		
12	Execute Defense	7-3/4-1115	85.1	78.2		
6	Knock Out a Bunker	7-3/4-1113	91.4	86.7		
14	Move Tactically	7-3/4-1134	90.9	88.9		
38	Perform a Screen	7-3-1006	88.9	100.0		
9	Perform Antiarmor Ambush	7-3/4-1143	80.0	88.0		
26	Perform Delay	7-3/4-1119	95.8	87.5		
22	Perform Infiltration/Exfiltration	7-3/4-1137	81.0	81.0		
21	Perform Linkup	7-3/4-1128	94.9	82.1		
4	Perform Overwatch/Support by Fire	7-3/4-1108	91.7	88.1		
45	Conduct Initial Breach of a Mined Wire Obstacle	7-3/4-1403	81.1	73.0	HIGH	MODERATE
42	Construct an Obstacle	7-3-1404	97.2	52.8		
2	Execute Assault	7-3/4-1103	94.4	66.7		
1	Execute Attack	7-3/4-1100	97.0	72.7		
5	Execute Disengagement	7-3/4-1122	89.4	72.1		
13	Occupy Assembly Area	7-3/4-1136	75.0	50.0		
15	Perform Actions at Danger Areas	7-3/4-1135	94.4	59.3		
52	Perform Consolidation and Reorganization	7-3/4-1607	100.0	71.6		
10	Perform Hasty Ambush	7-3/4-1144	82.6	68.1		
3	Perform Movement to Contact	7-3/4-1101	90.7	66.7		
17	Perform Passage of Lines	7-3/4-1125	86.0	54.4		
11	Perform Point Ambush	7-3/4-1145	80.3	61.5		
8	Perform Raid	7-3-1102	93.1	73.6		
27	Perform Relief Operations	7-3/4-1124	91.2	57.9		
20	Perform Stay-Behind Operation	7-3/4-1116	87.2	51.3		
51	Prepare for Combat	7-3/4-1606	88.3	56.7		
25	React to Ambush	7-3/4-1112	87.5	75.4		
35	Reconnoiter Area	7-3/4-1003	85.2	53.7		
36	Reconnoiter Route	7-3-1005	97.0	60.6		
34	Reconnoiter Zone	7-3-1004	100.0	66.7		
23	Take Action on Contact	7-3/4-1107	85.7	50.0		
50	Develop and Communicate a Plan	7-3/4-1605	100.0	41.3	HIGH	MARGINAL
32	Employ Fire Support	7-3/4-1200	96.2	48.7		
16	Perform Tactical Road March	7-3-1123	61.9	66.7	MODERATE	MODERATE
39	Breach an Obstacle	7-3/4-1402	66.7	44.4	MODERATE	MARGINAL
47	Perform Combat Service Support Operations	7-3/4-1501	66.7	36.7		
37	Perform Surveillance From an Observation Post	7-3/4-1008	61.1	33.3		
18	Clear a Building	7-3/4-1110	0.0	0.0	NOT SUPPORTED	
7	Clear Trench Line	7-3/4-1114	0.0	0.0		
31	Cross Water Obstacles	7-3/4-1131	0.0	0.0		
19	Defend MOUT/Building	7-3/4-1118	0.0	0.0		
44	Establish a Roadblock/Checkpoint	7-3/4-1401	0.0	0.0		
43	Maintain Operations Security	7-3/4-1409	0.0	0.0		
30	Perform Air Assault	7-3/4-1126	0.0	0.0		
28	Perform Airborne Assault	7-3/4-1127	0.0	0.0		
41	Perform NBC Operations	7-3/4-1406	0.0	0.0		
29	Perform Operations With Armored Vehicles	7-3/4-1140	0.0	0.0		
40	Perform Waterborne Operations	7-3/4-1408	0.0	0.0		
48	Process Enemy Prisoners of War/Captured Materiel	7-3/4-1503	0.0	0.0		
49	Treat and Evacuate Casualties	7-3/4-1504	0.0	0.0		

SCOUT PLATOON Bands of Potential					
No	**TASKS**	**TTCF-E**	**TTCF-F**	**EXECUTION**	**FEEDBACK**
22	TASK: CONDUCT A PLATOON DEFENSE (17-3-2605)	98.8	86.4	**HIGH**	**HIGH**
13	TASK: CONDUCT A ROUTE RECONNAISSANCE (17-3-1017)	87.2	76.9		
18	TASK: CONDUCT A SCREEN (17-3-1023)	87.0	79.6		
5	TASK: CONDUCT A TACTICAL ROAD MARCH (17-3-1012)	83.3	83.3		
15	TASK: CONDUCT BYPASS OPERATIONS (17-3-2420)	100.0	100.0		
25	TASK: CONDUCT CONVOY ESCORT (17-3-2320)	94.7	84.2		
19	TASK: CONDUCT HASTY OCCUPATION OF A PLATOON BP (17-3-2601)	94.9	94.9		
16	TASK: CONDUCT RECONNAISSANCE BY FIRE (17-3-0218)	100.0	81.8		
34	TASK: CONDUCT RESUPPLY OPERATIONS (17-3-1030)	95.2	81.0		
6	TASK: CONDUCT TACTICAL MOVEMENT (17-3-1016)	94.1	80.4		
7	TASK: COORD/CONDUCT A PASSAGE OF LINES FWD/REARWARD (17-3-1014)	92.6	88.9		
17	TASK: DESTROY AN INFERIOR FORCE (17-3-2450)	100.0	100.0		
23	TASK: DISPLACE TO AN ALT/SUCCESSIVE SCREEN LINEOR PLT BP (17-3-2627)	91.7	100.0		
9	TASK: EXECUTE ACTIONS ON CONTACT (17-3-1021)	100.0	95.8		
24	TASK: CONDUCT A RELIEF IN PLACE (17-3-1025)	85.2	55.6	**HIGH**	**MODERATE**
14	TASK: CONDUCT AN AREA/ZONE RECONNAISSANCE (17-3-4010)	76.9	64.1		
2	TASK: CONDUCT ASSEMBLY AREA ACTIVITIES (17-3-2000)	75.6	64.4		
20	TASK: CONDUCT DELIBERATE OCCUPATION OF A PLATOON BP (17-3-2602)	87.6	56.2		
3	TASK: CONDUCT LINKUP (17-3-2760)	93.3	68.9		
10	TASK: CONDUCT OVERWATCH/SUPPORT BY FIRE (17-3-3061)	100.0	74.1		
8	TASK: COORD/ASSIST A PASSAGE OF LINES FWD/REARWARD (17-3-1015)	80.7	73.7		
4	TASK: ESTABLISH AN OBSERVATION POST (17-3-1039)	80.8	52.6		
27	TASK: RECONNOITER AN OBSTACLE/RESTRICTION (17-3-1020)	86.1	63.9		
11	TASK: CONDUCT A DISMOUNTED PATROL AT TEAM LEVEL(17-3-4130)	88.9	44.4	**HIGH**	**MARGINAL**
31	TASK: CONDUCT DEMOLITION GUARD FORCE OPERATIONS(17-3-1027)	84.6	46.2		
1	TASK: CONDUCT TROOP-LEADING PROCEDURES (17-3-0065)	90.0	43.3		
21	TASK: PREPARE A PLATOON FIRE PLAN (17-3-0104)	75.0	33.3		
33	TASK: CONDUCT CONSOLIDATION AND REORG ACTIVITIES (12-3-C021)	66.7	66.7	**MODERATE**	**MODERATE**
32	TASK: CONDUCT PASSIVE AIR DEFENSE MEASURES (44-3-C001)	62.5	62.5		
12	TASK: CONDUCT AN NBC RECONNAISSANCE (17-3-4040)	0.0	0.0	**NOT SUPPORTED**	
28	TASK: CONDUCT OPERATIONAL DECONTAMINATION (3-3-C016)	0.0	0.0		
26	TASK: CONDUCT ROADBLOCK/CHECKPOINT OPERATIONS(17-3-2324)	0.0	0.0		
29	TASK: CROSS AN NBC CONTAMINATED AREA (17-3-8143)	0.0	0.0		
30	TASK: EMPLACE AND RETRIEVE A HASTY OBSTACLE (17-3-1026)			**UNRATED***	
		*Unable to rate at time of submission			

TANK PLATOON Bands of Potential					
No	TASKS	TTCF-E	TTCF-F	Execution	Feedback
34	ACTION DRILL (BD-3)	93.3	90.0	HIGH	HIGH
12	ASSAULT AN ENEMY POSITION (17-3-0220)	97.8	95.6		
32	CHANGE OF FORMATION DRILL (BD-1)	100	79.2		
21	CONDUCT A PERIMETER DEFENSE (17-3-2632)	100	77.8		
22	CONDUCT A PLATOON DEFENSE (17-3-2605)	86.3	80.4		
9	CONDUCT A TACTICAL ROAD MARCH (17-3-0212)	90.9	87.9		
13	CONDUCT AN ATTACK BY FIRE (17-3-0219)	100.0	100.0		
5	CONDUCT BYPASS OPERATIONS (17-3-2420)	100.0	100.0		
6	CONDUCT CONVOY ESCORT (17-3-2320)	94.9	79.5		
20	CONDUCT HASTY OCCUPATION OF A PLATOON BP (17-3-2601)	100.0	100.0		
14	CONDUCT OVERWATCH/SUPPORT BY FIRE (17-3-3061)	100.0	91.7		
15	CONDUCT RECONNAISSANCE BY FIRE (17-3-0218)	100.0	100.0		
8	CONDUCT TACTICAL MOVEMENT (17-3-1016)	100.0	89.7		
7	COORDINATE/CONDUCT PASSAGE OF LINES FWD/REARWARD (17-3-1014)	90.5	90.5		
11	DESTROY AN INFERIOR FORCE (17-3-2450)	100.0	100.0		
18	DISENGAGE FROM THE ENEMY (17-3-2380)	81.5	100		
24	DISPLACE TO SUCCESSIVE/ALTERNATE PLATOON BP (17-3-2625)	91.7	100.00		
10	EXECUTE ACTIONS ON CONTACT (17-3-0221)	100.0	96.1		
16	FOLLOW AND SUPPORT (17-3-2269)	81.3	81.3		
36	REACT TO AIR ATTACK DRILL (BD-5)	100	100		
19	CONDUCT DELIBERATE OCCUPATION OF PLATOON BP (17-3-2602)	87.7	52.60	HIGH	MODERATE
3	CONDUCT LINKUP (17-3-2760)	91.7	66.7		
31	CONDUCT RESUPPLY OPERATIONS (17-3-0601)	100	73.3		
33	CONTACT DRILL (BD-2)	75	69.4		
17	COORDINATE/ASSIST A PASSAGE OF LINES FWD/REARWARD (17-3-0214)	85.7	73.8		
4	ESTABLISH OBSERVATION POSTS (17-3-1039)	90.9	51.5		
23	CONDUCT A RELIEF IN PLACE (17-3-1025)	94.9	48.7	HIGH	MARGINAL
1	CONDUCT TROOP-LEADING PROCEDURES (17-3-0065)	94.4	44.4		
2	CONDUCT ASSEMBLY AREA ACTIVITIES (17-3-2000)	68.8	54.2	MODERATE	MODERATE
29	CONDUCT PASSIVE AIR DEFENSE MEASURES (44-3-C001)	66.7	66.7		
35	REACT TO INDIRECT FIRE DRILL (BD-4)	72.2	72.2		
30	CONDUCT CONSOLIDATION & REORG ACTIVITIES (12-3-C021)	33.3	33.3	MARGINAL	MARGINAL
25	CONDUCT BREACH FORCE OPERATIONS (17-3-3070)	NOT SUPPORTED			
26	CONDUCT OPERATIONAL DECONTAMINATION (3-3-C016)				
27	CROSS AN NBC CONTAMINATED AREA (17-3-8143)				
28	EMPLACE AND RETRIEVE A HASTY OBSTACLE (17-3-1026)				
38	REACT TO A CHEMICAL/BIOLOGICAL ATTACK DRILL (BD-7)				
37	REACT TO A NUCLEAR ATTACK DRILL (BD-6)				

RECOMMENDATION

The accreditation team has assessed all of the CCTT acceptability criteria against the data currently available on the software version released as of the date of this report. Each of these criteria are evaluated as either Acceptable or Acceptable With Risk. TSM CATT recommends to the TRADOC Deputy Chief of Staff – Training (DCST) that he provide an accreditation of the CCTT for use to train the MTP tasks of the close combat heavy force at the platoon and company/troop levels.

LIST OF ANNEXES

Annex A METHOD FOR ASSESSING TRAINING USES

1.1 Background.

The CCTT is being developed to overcome the deficiencies revealed in the Mission Area Analysis Plan for the Close Combat Forces. The active and reserve components of the United States Army need the capability to train the total combined arms force on a simulated, fully interactive, real time battlefield. A system is required to train and sustain individual and collective tasks and skills in command and control, communications, maneuver, and to integrate the functions of combat support and combat service support units. This requires the capability to simulate, in real time, the conduct of combat operations in a realistic environment with an appropriate and challenging opposing force that will require realistic individual, crews and staff actions, placing the stresses of combat on all participants.

The CCTT system will allow individuals, crews, and units to operate in a simulated combat environment. This will reduce the impact of weapons effects restrictions, safety concerns, terrain limitations, time allocation, and help in overcoming the adverse effects of crew turbulence and scarce resources. This will allow units to raise or maintain their level of training and ensure more efficient use of their training assets when they train in the field.

The CCTT training goal is to practice and achieve a level of proficiency on collective tasks and subtasks prior to field training. The CCTT will also be used as a sustainment trainer in conjunction with periods of field training and as an advanced trainer that can provide conditions for task training that are more intense than available during field training conditions.

1.2 Purpose.

There are insufficient resources for every unit to have unlimited training time in CCTT. Therefore, the purpose of this training uses assessment is provide a means by which the Accreditation Team can:

- Identify the potential for training each task in an ARTEP MTP in the CCTT environment and
- Provide a relative rank ordering of those tasks.

1.3 Premise.

In order to train MTP tasks, tasks must be executed in an environment which provides appropriate stimuli causing responses by the unit personnel undergoing training. These responses must be assessed by the trainer. In turn, the trainer must provide feedback to the unit personnel undergoing training so that they discover for themselves what happened, why it happened, and how it can be done better.

To objectively assess a training environment, such as CCTT, two factors need to be considered: (1) the environment in which tasks are *executed* and (2) the mechanisms provided in the environment for *feedback.*

- Evaluation of the adequacy of the environment for *execution* for a given task will consider 1) whether sufficient cues are present within the system, 2) whether the system provides appropriate responses to the trainee inputs and scenario events, and whether the system detracts from trainee cognitive processes.
- Evaluation of the adequacy of the environment for *feedback* will consider whether there are sufficient data, information, and facilities for assessing and diagnosing performance independent of the trainer and trainee.

Thus, the assessment of training uses of CCTT will focus on 1) the environment provided within CCTT for *execution* of MTP tasks, and 2) the environment provided within CCTT for *feedback* on trainee performance.

1.4 Approach.

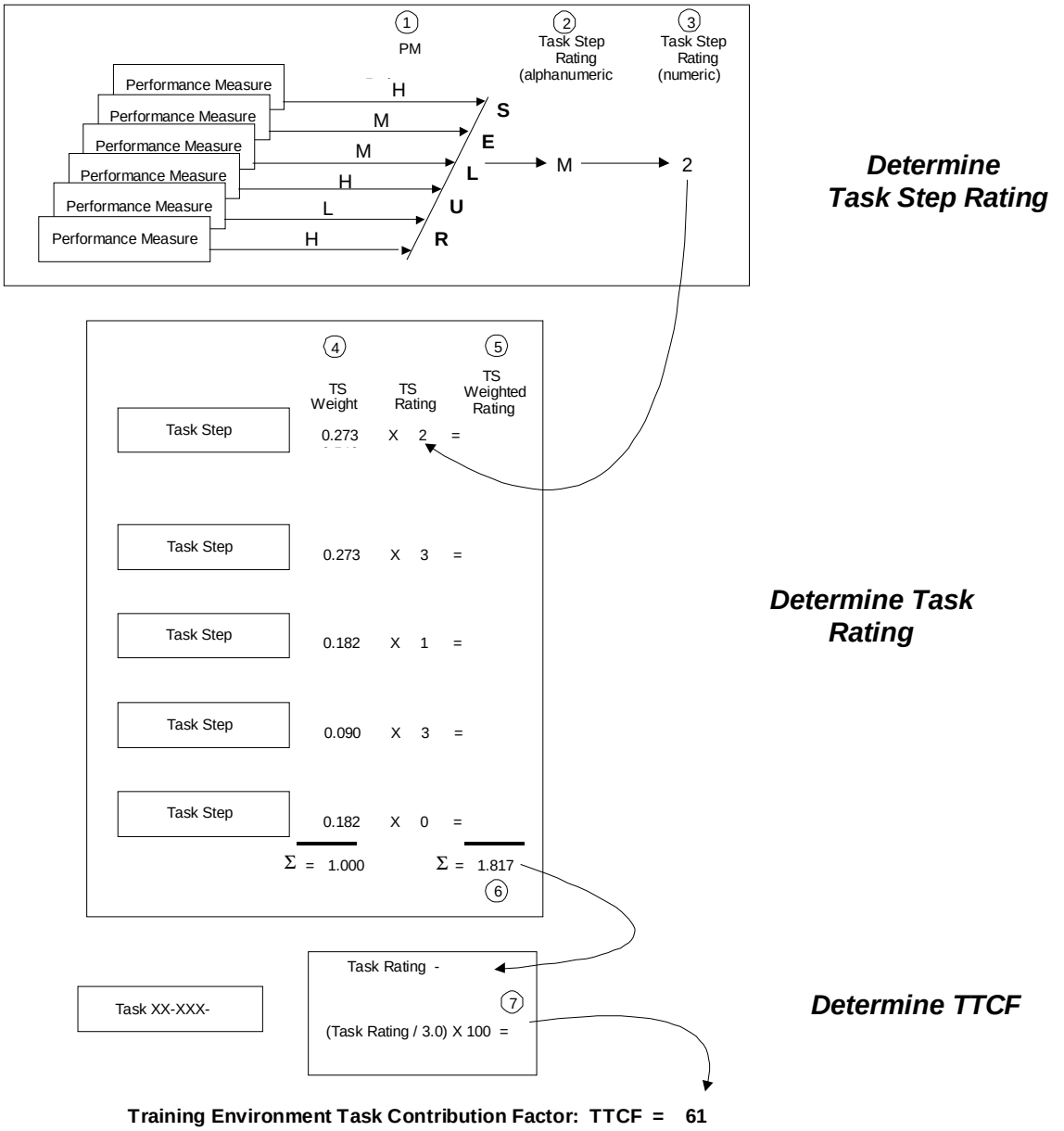
In order to identify which tasks have the highest potential for being trained in CCTT, the Accreditation Team will develop Training environment Task Contribution Factors for execution and feedback for each task in an MTP and then will rank order those tasks.

1.4.1 Development of Training environment Task Contribution Factors (TTCFs).

A TTCF is a number on a scale from 0 to 100 which represents the overall assessment by the Accreditation Team of the *opportunity or potential for training a specific task (execution and/or feedback) in the CCTT training environment*. Opportunity / potential incorporates both how well performance measures of step tasks can be trained and the contribution (relative value) of those step tasks in training tasks.

The TTCF development process is a modification of and extension to the methodology for the development of the Task Performance Support (TPS) Codes for MTP tasks (reference Annex C, Section C1, Government Documentation). This process is based on the paradigm that training requires the application of cues, the awareness of responses to those cues, and a feedback mechanism that supports an adequate understanding of the results and the causes of those results. The process is reflected in Figure B-1 and the steps that follow.

Figure B-1. TRAINING ENVIRONMENT TASK CONTRIBUTION FACTOR DEVELOPMENT PROCESS



Training Environment Task Contribution Factor: TTCF = 61

Step 1. Rate all Performance Measures within each Task Step. A Performance Measure Rating is an assessment by CCTT subject matter experts on how well CCTT provides an environment for training a specific performance measure. Ratings are on a discrete bench marked scale of Highly Supported to Not Supported. Ratings are made for both execution and feedback.

a. *Execution.* The ratings assess the degree to which performance measure can be executed; whether sufficient cues are present within the training environment; whether appropriate responses are supported to permit practice of tactics and techniques; and whether missing

cues/responses cause negative training. The following rating scale (adapted from the TPS Codes) is used in determining the *execution* portion of the training experience:

Rating of H: High support. Training is fully supported with physical cues and responses and/or does not detract from cognitive processes (e.g. leader planning task steps).

Examples:

- Company team adjusts the rate of fire, based on the tactical situation.
- Tank platoon leader identifies covered and concealed routes to be used during movement to overwatch/support by fire positions.

Rating of M: Moderate Support. Training is supported with physical cues and responses and/or minimally detracts from cognitive processes.

Examples:

- Company team conducts last minute checks of weapon systems, vehicles, and equipment.
- Mechanized platoon support team delivers continuous, well-aimed fire with enough volume to suppress the enemy and to prevent the assault element from being fixed.

Rating of L: Low Support. Training is marginally supported with physical cues and responses and/or may detract from cognitive processes.

Examples:

- Company team emplaces hasty minefield and other hasty obstacles.
- Mechanized platoon establishes communications from the platoon CP to the squad positions.

Rating of N: No Support. Training is not support with physical cues and responses and/or detracts from cognitive processes. The performance measure cannot be executed in the training environment. A significant number of essential cues and responses are not provided.

Examples:

- Company team evacuates the seriously wounded and KIAs.
- Mechanized platoon places Claymore mines to cover the kill zone and the platoon's withdrawal routes.

Comments: Written comments should be made to describe any necessary functionality that is missing or insufficiently implemented.

b. *Feedback*. Assessments are made on the explicit capabilities of CCTT to record and/or provide information for feedback. Additional information collected by direct interaction between

trainer and trainee are not controllable and therefore not considered available in the assessment automatically. The following rating scale is used in determining the *feedback portion* of the training experience:

Rating of H: High Support. CCTT records and provides sufficient visual / audible / numeric data necessary to fully support feedback.

Examples:

- Company commander positions subordinate elements. Provides mutual support fields of fire, cover, and room for disposition.
- If the platoon displacement is covered by an overwatch element, moves as a unit to the next BP, keeping weapon systems oriented toward the enemy.

Rating of M: Moderate Support. CCTT records and provides sufficient visual / audible / numeric data necessary to marginally support feedback.

Examples:

- Company team remains in hide positions until ready to assault. Maintains stealth.
- Support element occupies defensive positions according to OPORD or SOP and prepares for enemy counterattack.

Rating of L: Low Support. CCTT records and provides sufficient visual / audible / numeric data necessary to minimally support feedback and/or information is expected to be obtained through direct interaction between trainer and trainee.

Examples:

- Company team commander develops engagement criteria.
- Platoon maintains security during movement.

Rating of N: No Support. CCTT does not record and provide sufficient visual / audible / numeric data necessary to support feedback and/or information is not expected to be obtained through direct interaction between trainer and trainee.

Examples:

- Company team reloads ready storage area and machine gun bins to capacity.
- Squad leaders control fires using standard fire commands.

Step 2. Determine Task Step Rating (alphanumeric). MTP Task Step ratings are derived by combining the performance ratings in accordance with the following heuristic rules:

>= 4 Performance Measures:

H - Greater than 66% of the associated performance measures must be rated as an “H”; no performance measures may be rated “L” or “N”.

M - At least 66% of the associated performance measures must be rated either “H” or “M”; the remaining performance measures may have any rating.

L - At least 25% of the associated performance measures must be rated “L”.

N - If none of the above conditions is met, the task-step is rated “N”.

= 3 Performance Measures:

H- Two of the associated performance measures must be rated as an “H”; the remaining associated performance measures may not be rated “L” or “N”.

M - Two of the associated performance measures must be rated either “H” or “M”; the remaining performance measure may have any rating.

L - At least one of the performance measures must be rated “L”.

N - If none of the above conditions is met, the task-step is rated “N”.

= 2 Performance Measures:

H- Both of the associated performance measures must be rated as an “H”.

M - Both of the associated performance measures must be rated either “H” or “M”.

L - At least one of the performance measures must be rated “H” or “M”; the remaining performance measure must be rated “L”.

N - If none of the above conditions is met, the task-step is rated “N”.

= 1 Performance Measure:

The task step receives the rating assigned to its associated performance measure.

Exception: If the task step does not contain any subordinate performance measures, it is rated in a similar fashion to the performance measure using the H, M, L, & N ratings. This is called a stand-alone task step.

Step 3. Translating Task Step Rating to Numeric. Translate the task step rating to a number in accordance with the following:

- A task step alphanumeric rating of "H" equals a 3.
- A task step alphanumeric rating of "M" equals a 2.
- A task step alphanumeric rating of "L" equals a 1.
- A task step alphanumeric rating of "N" equals a 0.

Step 4. Determine Task Step Weights for all Tasks Steps within a Task. Each task step associated with a specific task is given a weight by TRADOC representatives. These weights are made independent of the performance measure ratings made by the Accreditation Team. TRADOC representatives weight each task step separately on a scale of 0 to 3 based on how important it is that the task step be trained in the CCTT environment. Weights for task steps are given on the following scale:

- Essential is given a weight of 3.
- Medium importance is given a weight of 2.
- Low importance is given a weight of 1.
- Not important is given a weight of 0.

To identify the relative importance or contribution in training the task steps for their associated task in the CCTT environment, the Accreditation Team then normalizes the TRADOC weights for each task step to a scale from 0 to 1.0.

Step 5. Calculate Task Step Weighted Ratings for each Task Step. The Task Step Weighted Rating is the product of the Task Step Weight and the Task Step Rating.

Step 6. Sum Task Step Weighted Ratings. The sum of the task step weights represents the total weighted contribution to training of all the task steps associated with that specific task. The maximum value of this sum is 3.0. The sum of Task Step Weighted Ratings for each task is that task's rating.

Step 7. Calculate TTCF. Normalize the Task Rating to a 100 point scale by dividing the Task Rating by 3.0 and multiply by 100.

Note: For a critical (essential) performance measure(s), a Performance Measure Rating(s) of zero mandates that the associated Task Step Rating be zero. For critical (essential) tasks steps, a Task Step Rating of zero mandates that the associated TTCF be zero.

1.4.2 Analysis of Task Training Potential.

As stated in section 1.4.1, a TTCF is a number on a scale from 0 to 100 which represents the overall assessment by the Accreditation Team of the *opportunity or potential for training a specific task (execution and/or feedback) in the CCTT training environment*. Opportunity / potential incorporates both how well performance measures of step tasks can be trained and the contribution (relative value) of those step tasks in training tasks.

As illustrated in Figure B-2, the ratings of performance measures for a specific task step are made on a discrete alphanumeric scale from "N" to "H". These performance measures ratings are combined or rolled up (according to the hueristic decision rules) to the task step ratings. The task step ratings are still on the same discrete alphanumeric scale as the performance measure rating scale. The task step alphanumeric ratings are translated to a numeric scale to permit incorporating task step weights. A continuous task rating scale (from 0.0 to 3.0) results when the numeric task step weights are combined with the numeric task step ratings. The task ratings are translated to a scale of 0.0 to 100.0 because this is a more commonly used and understood scale.

For the purpose of establishing an ordinal ranking of tasks, TTCF-Es (execution) and TTCF-Fs (feedback) are categorized into the following "bands of potential":

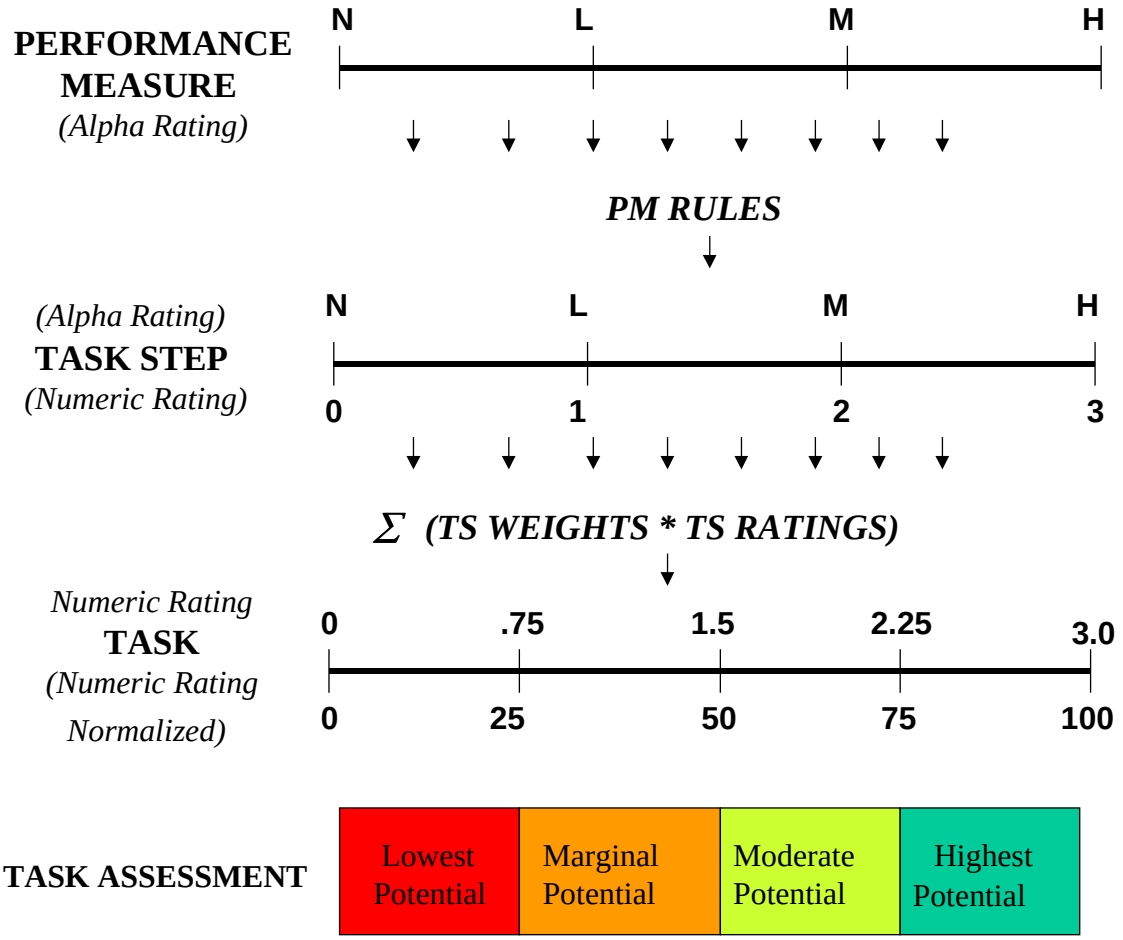
- Highest Potential: TTCF of 75.0 to 100.0
- Moderate Potential: TTCF of 50.0 to 74.9
- Marginal Potential: TTCF of 25.0 to 49.0
- Lowest Potential: TTCF of 0.0 to 24.9

These "bands of potential" are used for several reasons. The performance ratings and task step weights are subjective in nature. Although, the ratings and weights are made by subject matter experts from the Accreditation Team, the Infantry School, and Armor School, the sample sizes are small. To account for variances in ratings and weights, the task ratings for execution and feedback are placed into bands based on their TTCFs.

The task rating continuous numeric scale is derived from the performance measure and task step discrete alphanumeric scales when task step weights are incorporated in the TTCF development process. The task rating "bands of potential" can be thought of as "confidence areas" associated with the performance measure rating scale.

The use of four "bands of potential" correlates to quartiles. TTCFs falling in the first and fourth quartiles are readily acceptable as being of lowest and highest potential, respectively. TTCFs in the second and third quartiles are not as easily understood, interpreted or accepted.

Figure B-2. SCALE RELATIONSHIPS



The ordinal ranking of tasks within an ARTEP MTP is done in a three stage hueristic process:

1. The tasks are sorted by TTCFs for execution (TTCF-E) from highest to lowest. The tasks are placed in the appropriate "band of potential" - Highest, Moderate, Marginal, and Lowest based on the TTCF-Es. The tasks in each TTCF-E "band of potential" are further sorted by TTCFs for feedback (TTCF-F) and placed in "bands of potential". This is represented in Table B-1, Task Sorting.

Table B-1. TASK SORTING

EXECUTION POTENTIAL	FEEDBACK POTENTIAL
HIGH	HIGH
HIGH	MODERATE
HIGH	MARGINAL
HIGH	LOW
MODERATE	HIGH
MODERATE	MODERATE
MODERATE	MARGINAL
MODERATE	LOW
MARGINAL	HIGH
MARGINAL	MODERATE
MARGINAL	MARGINAL
MARGINAL	LOW
LOW	HIGH
LOW	MODERATE
LOW	MARGINAL
LOW	LOW

Table B-2. TASK RANKING

EXECUTION POTENTIAL	FEEDBACK POTENTIAL
HIGH	HIGH
HIGH	MODERATE
MODERATE	HIGH
HIGH	MARGINAL
MODERATE	MODERATE
HIGH	LOW
MODERATE	MARGINAL
MARGINAL	HIGH
MODERATE	LOW
MARGINAL	MODERATE
MARGINAL	MARGINAL
MARGINAL	LOW
LOW	HIGH
LOW	MODERATE
LOW	MARGINAL
LOW	LOW

2. The tasks, as sorted in Table B-1, are then placed in the priority given in Table B-2, Task Ranking.

3. The list of ranked tasks is then reviewed with particular emphasis on those tasks bordering the next higher or lower category (execution and feedback combination of "bands of potential"). This is done qualitatively or, possibly, with a clustering technique such as joint clustering.

The ordinal ranking of tasks within an MTP are the results of this process.

Annex B Detailed MTP Task Assessments

ARTEP 71-1 MTP, Tank/Mechanized Infantry Team (1988/10/03)

1. Conduct Fire and Maneuver (71-2-0222)

CORE

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 100.0 a*c	TTCF-f 100.0 b*c
1	H	3	H	3	3	0.2143	0.643	0.643
2	H	3	H	3	3	0.2143	0.643	0.643
3	H	3	H	3	3	0.2143	0.643	0.643
4	H	3	H	3	2	0.1429	0.429	0.429
5	H	3	H	3	3	0.2143	0.643	0.643
					14	1.0000	3.000	3.000

2. Occupy Assembly Area (17-2-0325)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 46.7 a*c	TTCF-f 24.4 b*c
1	M	2	L	1	1	0.0667	0.133	0.067
2	N	0	N	0	0	0.0000	0.000	0.000
3	L	1	L	1	1	0.0667	0.067	0.067
4	H	3	L	1	1	0.0667	0.200	0.067
5	N	0	N	0	2	0.1333	0.000	0.000
6	N	0	N	0	2	0.1333	0.000	0.000
7	L	1	L	1	3	0.2000	0.200	0.200
8	M	2	L	1	1	0.0667	0.133	0.067
9	M	2	L	1	2	0.1333	0.267	0.133
10	H	3	L	1	1	0.0667	0.200	0.067
11	H	3	L	1	1	0.0667	0.200	0.067
12	L	1	H	3	0	0.0000	0.000	0.000
					15	1.0000	1.400	0.733

3. Perform Tactical Movement (17-2-0301)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 91.2 a*c	TTCF-f 73.7 b*c
1	H	3	L	1	2	0.1053	0.316	0.105
2	H	3	M	2	3	0.1579	0.474	0.316
3	M	2	M	2	3	0.1579	0.316	0.316
4	H	3	H	3	3	0.1579	0.474	0.474
5	H	3	H	3	2	0.1053	0.316	0.316
6	M	2	L	1	2	0.1053	0.211	0.105
7	H	3	M	2	1	0.0526	0.158	0.105
8	M	2	M	2	0	0.0000	0.000	0.000
9	H	3	H	3	3	0.1579	0.474	0.474
					19	1.0000	2.737	2.211

4. Perform Tactical Road March (17-2-0302

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 98.1 a*c	TTCF-f 83.3 b*c
1	H	3	L	1	2	0.1111	0.333	0.111
2	M	2	L	1	1	0.0556	0.111	0.056
3	H	3	H	3	3	0.1667	0.500	0.500
4	H	3	H	3	3	0.1667	0.500	0.500
5	H	3	H	3	3	0.1667	0.500	0.500
6	H	3	M	2	3	0.1667	0.500	0.333
7	H	3	H	3	3	0.1667	0.500	0.500
					18	1.0000	2.944	2.500

Figure 5

5. Perform Reconnaissance (17-2-0202)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 100.0 a*c	TTCF-f 70.8 b*c
1	H	3	L	1	2	0.1250	0.375	0.125
2	H	3	L	1	2	0.1250	0.375	0.125
3	H	3	M	2	2	0.1250	0.375	0.250
4	H	3	M	2	2	0.1250	0.375	0.250
5	H	3	H	3	3	0.1875	0.563	0.563
6	H	3	H	3	3	0.1875	0.563	0.563
7	H	3	M	2	2	0.1250	0.375	0.250
					16	1.0000	3.000	2.125

6. Perform Local Chemical Reconnaissance

(03-2-C025) **NOT SUPPORTED**

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	0	0.0000	0.000	0.000
2	N	0	N	0	0	0.0000	0.000	0.000
6	N	0	N	0	0	0.0000	0.000	0.000
7	N	0	N	0	0	0.0000	0.000	0.000
					0	0.0000	0.000	0.000

7. Perform Local Radiological Reconnaissance

(03-2-C032) NOT SUPPORTED

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	0	0.0000	0.000	0.000
2	N	0	N	0	0	0.0000	0.000	0.000
3	N	0	N	0	0	0.0000	0.000	0.000
4	N	0	N	0	0	0.0000	0.000	0.000
					0	0.0000	0.000	0.000

8. Perform Passage of Lines (17-2-0303)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 91.3 a*c	TTCF-f 58.0 b*c
1	H	3	L	1	2	0.0870	0.261	0.087
2	H	3	L	1	2	0.0870	0.261	0.087
3	H	3	L	1	3	0.1304	0.391	0.130
4	H	3	H	3	1	0.0435	0.130	0.130
5	M	2	H	3	3	0.1304	0.261	0.391
6	H	3	M	2	3	0.1304	0.391	0.261
7	H	3	L	1	3	0.1304	0.391	0.130
8	H	3	L	1	3	0.1304	0.391	0.130
9	H	3	L	1	0	0.0000	0.000	0.000
10	M	2	H	3	3	0.1304	0.261	0.391
					23	1.0000	2.739	1.739

9. Assist Passage of Lines (17-2-0327)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 93.3 a*c	TTCF-f 70.0 b*c
1	H	3	L	1	1	0.1000	0.300	0.100
2	H	3	L	1	1	0.1000	0.300	0.100
3	M	2	H	3	1	0.1000	0.200	0.300
4	H	3	L	1	1	0.1000	0.300	0.100
5	H	3	H	3	1	0.1000	0.300	0.300
6	M	2	M	2	1	0.1000	0.200	0.200
7	H	3	M	2	1	0.1000	0.300	0.200
8	H	3	H	3	1	0.1000	0.300	0.300
9	H	3	M	2	1	0.1000	0.300	0.200
10	H	3	H	3	1	0.1000	0.300	0.300
					10	1.0000	2.800	2.100

Figure 6

10. Perform Assault Position Activities (17-2-0328)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 92.3 a*c	TTCF-f 84.6 b*c
1	H	3	H	3	3	0.2308	0.692	0.692
2	M	2	M	2	3	0.2308	0.462	0.462
3	H	3	M	2	3	0.2308	0.692	0.462
4	H	3	H	3	2	0.1538	0.462	0.462
5	H	3	H	3	2	0.1538	0.462	0.462
					13	1.0000	2.769	2.538

11. Perform Actions on Contact (17-2-0304)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 100.0 a*c	TTCF-f 82.7 b*c
1	H	3	H	3	3	0.1200	0.360	0.360
2	H	3	H	3	3	0.1200	0.360	0.360
3	H	3	M	2	3	0.1200	0.360	0.240
4	H	3	L	1	3	0.1200	0.360	0.120
5	H	3	L	1	2	0.0800	0.240	0.080
6	H	3	H	3	2	0.0800	0.240	0.240
7	H	3	H	3	3	0.1200	0.360	0.360
8	H	3	H	3	3	0.1200	0.360	0.360
9	H	3	H	3	3	0.1200	0.360	0.360
					25	1.0000	3.000	2.480

12. Support by Fire (17-2-0306)

CORE

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 100.0 a*c	TTCF-f 70.8 b*c
1	H	3	H	3	1	0.0625	0.188	0.188
2	H	3	L	1	1	0.0625	0.188	0.063
3	H	3	L	1	3	0.1875	0.563	0.188
4	H	3	M	2	2	0.1250	0.375	0.250
5	H	3	L	1	2	0.1250	0.375	0.125
6	H	3	H	3	1	0.0625	0.188	0.188
7	H	3	H	3	2	0.1250	0.375	0.375
8	H	3	H	3	3	0.1875	0.563	0.563
9	H	3	H	3	1	0.0625	0.188	0.188
					16	1.0000	3.000	2.125

13. Occupy Objective Rally Point (17-2-0307)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 83.3 a*c	TTCF-f 33.3 b*c
1	H	3	H	3	0	0.0000	0.000	0.000
2	H	3	L	1	1	0.5000	1.500	0.500
3	H	3	H	3	0	0.0000	0.000	0.000
4	M	2	L	1	0	0.0000	0.000	0.000
5	M	2	L	1	1	0.5000	1.000	0.500
					2	1.0000	2.500	1.000

14. Perform Attack Position Activities (17-2-0329)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 87.5 a*c	TTCF-f 87.5 b*c
1	H	3	H	3	1	0.1250	0.375	0.375
2	H	3	H	3	1	0.1250	0.375	0.375
3	M	2	M	2	3	0.3750	0.750	0.750
4	H	3	H	3	3	0.3750	1.125	1.125
					8	1.0000	2.625	2.625

15. Assault an Enemy Position (Dismounted) (17-2-0310)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 81.3 a*c	TTCF-f 75.0 b*c
1	H	3	H	3	1	0.0625	0.188	0.188
2	M	2	M	2	2	0.1250	0.250	0.250
3	H	3	H	3	3	0.1875	0.563	0.563
4	H	3	M	2	3	0.1875	0.563	0.375
5	M	2	M	2	3	0.1875	0.375	0.375
6	M	2	M	2	3	0.1875	0.375	0.375
7	M	2	M	2	1	0.0625	0.125	0.125
					16	1.0000	2.438	2.250

Figure 7

16. Assault an Enemy Position (Mounted)

(17-2-0326) CORE

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 100.0 a*c	TTCF-f 92.6 b*c
1	H	3	H	3	2	0.2222	0.667	0.667
2	H	3	M	2	2	0.2222	0.667	0.444
3	H	3	H	3	3	0.3333	1.000	1.000
10	H	3	H	3	2	0.2222	0.667	0.667
					9	1.0000	3.000	2.778

17. Perform an Attack by Fire (17-2-0311)

CORE

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 100.0 a*c	TTCF-f 94.9 b*c
1	H	3	L	1	1	0.0769	0.231	0.077
2	H	3	H	3	2	0.1538	0.462	0.462
3	H	3	H	3	3	0.2308	0.692	0.692
4	H	3	H	3	2	0.1538	0.462	0.462
5	H	3	H	3	3	0.2308	0.692	0.692
6	H	3	H	3	2	0.1538	0.462	0.462
					13	1.0000	3.000	2.846

18. Perform Raid (Mounted & Dismounted)

(17-2-0308)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 85.3 a*c	TTCF-f 78.7 b*c
1	H	3	L	1	1	0.0400	0.120	0.040
2	H	3	M	2	2	0.0800	0.240	0.160
3	H	3	M	2	2	0.0800	0.240	0.160
4	H	3	M	2	2	0.0800	0.240	0.160
5	H	3	H	3	3	0.1200	0.360	0.360
6	H	3	M	2	3	0.1200	0.360	0.240
7	M	2	H	3	2	0.0800	0.160	0.240
8	M	2	H	3	3	0.1200	0.240	0.360
9	M	2	M	2	3	0.1200	0.240	0.240
10	M	2	H	3	2	0.0800	0.160	0.240
11	M	2	L	1	1	0.0400	0.080	0.040
12	H	3	H	3	1	0.0400	0.120	0.120
					25	1.0000	2.560	2.360

19. Perform Ambush (17-2-0309)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 93.1 a*c	TTCF-f 86.1 b*c
1	H	3	L	1	1	0.0417	0.125	0.042
2	H	3	H	3	1	0.0417	0.125	0.125
3	M	2	M	2	1	0.0417	0.083	0.083
4	H	3	H	3	1	0.0417	0.125	0.125
5	H	3	L	1	1	0.0417	0.125	0.042
6	H	3	M	2	2	0.0833	0.250	0.167
7	H	3	H	3	2	0.0833	0.250	0.250
8	H	3	M	2	2	0.0833	0.250	0.167
9	M	2	M	2	1	0.0417	0.083	0.083
10	H	3	H	3	2	0.0833	0.250	0.250
11	H	3	H	3	3	0.1250	0.375	0.375
12	H	3	H	3	2	0.0833	0.250	0.250
13	M	2	H	3	3	0.1250	0.250	0.375
14	H	3	H	3	1	0.0417	0.125	0.125
15	H	3	H	3	1	0.0417	0.125	0.125
					24	1.0000	2.792	2.583

20. Perform Air Assault (17-2-0331)

NOT SUPPORTED

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	0	0.0000	0.000	0.000
2	N	0	N	0	0	0.0000	0.000	0.000
3	N	0	N	0	0	0.0000	0.000	0.000
4	N	0	N	0	0	0.0000	0.000	0.000
5	N	0	N	0	0	0.0000	0.000	0.000
6	N	0	N	0	0	0.0000	0.000	0.000
7	N	0	N	0	0	0.0000	0.000	0.000
8	N	0	N	0	0	0.0000	0.000	0.000
9	N	0	N	0	0	0.0000	0.000	0.000
10	N	0	N	0	0	0.0000	0.000	0.000
					0	0.0000	0.000	0.000

21. Perform Hasty River/Gap Crossing

(17-2-0332)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 80.0 a*c	TTCF-f 73.3 b*c
1	H	3	L	1	0	0.0000	0.000	0.000
2	H	3	H	3	1	0.1000	0.300	0.300
3	H	3	H	3	1	0.1000	0.300	0.300
4	L	1	M	2	2	0.2000	0.200	0.400
5	M	2	L	1	2	0.2000	0.400	0.200
6	H	3	L	1	1	0.1000	0.300	0.100
7	H	3	H	3	2	0.2000	0.600	0.600
8	H	3	H	3	1	0.1000	0.300	0.300
					10	1.0000	2.400	2.200

Figure 8

22. Perform Screen Operations (17-2-0312)

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 95.2 a*c	TTCF-f 71.4 b*c
1	H	3	L	1	2	0.0952	0.286	0.095
2	H	3	H	3	3	0.1429	0.429	0.429
3	H	3	M	2	3	0.1429	0.429	0.286
4	H	3	L	1	1	0.0476	0.143	0.048
5	H	3	L	1	3	0.1429	0.429	0.143
6	H	3	M	2	3	0.1429	0.429	0.286
7	H	3	H	3	3	0.1429	0.429	0.429
8	M	2	H	3	3	0.1429	0.286	0.429
					21	1.0000	2.857	2.143

23. Perform Guard Operations (17-2-0330)

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 73.3 a*c	TTCF-f 53.3 b*c
1	H	3	L	1	3	0.2000	0.600	0.200
2	H	3	M	2	3	0.2000	0.600	0.400
3	H	3	H	3	3	0.2000	0.600	0.600
4	M	2	M	2	3	0.2000	0.400	0.400
5	N	0	N	0	3	0.2000	0.000	0.000
					15	1.0000	2.200	1.600

24. Cross a Radiologically Contaminated Area (17-2-0314) NOT SUPPORTED

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	0	0.0000	0.000	0.000
2	N	0	N	0	0	0.0000	0.000	0.000
3	N	0	N	0	0	0.0000	0.000	0.000
4	N	0	N	0	0	0.0000	0.000	0.000
5	N	0	N	0	0	0.0000	0.000	0.000
					0	0.0000	0.000	0.000

25. Cross a Chem/Bio Contaminated Area (17-2-0313) NOT SUPPORTED

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	0	0.0000	0.000	0.000
2	N	0	N	0	0	0.0000	0.000	0.000
3	N	0	N	0	0	0.0000	0.000	0.000
4	N	0	N	0	0	0.0000	0.000	0.000
5	N	0	N	0	0	0.0000	0.000	0.000
6	N	0	N	0	0	0.0000	0.000	0.000
					0	0.0000	0.000	0.000

26. Defend (17-2-1021) CORE

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 81.1 a*c	TTCF-f 70.0 b*c
1	H	3	L	1	1	0.0333	0.100	0.033
2	L	1	H	3	1	0.0333	0.033	0.100
3	H	3	L	1	2	0.0667	0.200	0.067
4	M	2	M	2	3	0.1000	0.200	0.200
5	L	1	M	2	2	0.0667	0.067	0.133
6	M	2	L	1	2	0.0667	0.133	0.067
7	H	3	H	3	1	0.0333	0.100	0.100
8	H	3	L	1	1	0.0333	0.100	0.033
9	H	3	L	1	1	0.0333	0.100	0.033
10	M	2	L	1	1	0.0333	0.067	0.033
11	N	0	L	1	1	0.0333	0.000	0.033
12	H	3	M	2	2	0.0667	0.200	0.133
13	H	3	H	3	3	0.1000	0.300	0.300
14	H	3	H	3	3	0.1000	0.300	0.300
15	H	3	H	3	3	0.1000	0.300	0.300
16	M	2	M	2	2	0.0667	0.133	0.133
17	H	3	H	3	1	0.0333	0.100	0.100
					30	1.0000	2.433	2.100

27. Linkup (17-2-0318)

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 87.5 a*c	TTCF-f 62.5 b*c
1	H	3	L	1	1	0.1250	0.375	0.125
2	H	3	M	2	1	0.1250	0.375	0.250
3	H	3	M	2	1	0.1250	0.375	0.250
4	M	2	L	1	1	0.1250	0.250	0.125
5	H	3	H	3	1	0.1250	0.375	0.375
6	M	2	M	2	1	0.1250	0.250	0.250
7	M	2	M	2	1	0.1250	0.250	0.250
8	H	3	M	2	1	0.1250	0.375	0.250
					8	1.0000	2.625	1.875

28. Breakout from Encirclement (17-2-0319)

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 85.7 a*c	TTCF-f 71.4 b*c
1	H	3	M	2	1	0.1429	0.429	0.286
2	H	3	H	3	1	0.1429	0.429	0.429
3	M	2	M	2	1	0.1429	0.286	0.286
4	M	2	M	2	2	0.2857	0.571	0.571
5	H	3	M	2	2	0.2857	0.857	0.571
					7	1.0000	2.571	2.143

Figure 9

29. Infiltrate/Exfiltrate (17-2-0320)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 77.8 a*c	TTCF-f 66.7 b*c
1	H	3	L	1	1	0.3333	1.000	0.333
2	M	2	M	2	1	0.3333	0.667	0.667
3	L	1	M	2	0	0.0000	0.000	0.000
4	M	2	H	3	1	0.3333	0.667	1.000
5	H	3	H	3	0	0.0000	0.000	0.000
					3	1.0000	2.333	2.000

30. Delay (17-2-0321)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 81.8 a*c	TTCF-f 72.7 b*c
1	H	3	L	1	2	0.1818	0.545	0.182
2	H	3	L	1	1	0.0909	0.273	0.091
3	L	1	M	2	3	0.2727	0.273	0.545
5	H	3	H	3	3	0.2727	0.818	0.818
6	H	3	H	3	2	0.1818	0.545	0.545
					11	1.0000	2.455	2.182

31. Withdraw Not Under Enemy Pressure (17-2-0322)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 70.4 a*c	TTCF-f 63.0 b*c
1	M	2	L	1	3	0.3333	0.667	0.333
2	L	1	M	2	1	0.1111	0.111	0.222
3	M	2	M	2	3	0.3333	0.667	0.667
4	H	3	H	3	2	0.2222	0.667	0.667
					9	1.0000	2.111	1.889

32. Withdraw Under Enemy Pressure (17-2-0323)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 100.0 a*c	TTCF-f 72.7 b*c
1	H	3	L	1	3	0.2727	0.818	0.273
2	H	3	M	2	3	0.2727	0.818	0.545
3	H	3	H	3	3	0.2727	0.818	0.818
4	H	3	H	3	2	0.1818	0.545	0.545
					11	1.0000	3.000	2.182

33. Perform Relief in Place (17-2-0324)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 70.0 a*c	TTCF-f 73.3 b*c
1	M	2	M	2	1	0.1000	0.200	0.200
2	L	1	M	2	1	0.1000	0.100	0.200
3	H	3	L	1	1	0.1000	0.300	0.100
4	H	3	L	1	1	0.1000	0.300	0.100
5	M	2	H	3	2	0.2000	0.400	0.600
6	M	2	H	3	2	0.2000	0.400	0.600
7	M	2	M	2	2	0.2000	0.400	0.400
					10	1.0000	2.100	2.200

34. Employ Indirect Fire in the Offense (17-2-0401)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 88.9 a*c	TTCF-f 44.4 b*c
1	H	3	L	1	3	0.3333	1.000	0.333
2	H	3	L	1	3	0.3333	1.000	0.333
3	M	2	M	2	3	0.3333	0.667	0.667
					9	1.0000	2.667	1.333

35. Employ Indirect Fire in the Defense (17-2-0402)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 77.8 a*c	TTCF-f 44.4 b*c
1	M	2	L	1	3	0.3333	0.667	0.333
2	H	3	L	1	3	0.3333	1.000	0.333
3	M	2	M	2	3	0.3333	0.667	0.667
					9	1.0000	2.333	1.333

Figure 10

36. Breach an Obstacle (17-2-0501)

CORE

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 93.8 a*c	TTCF-f 81.3 b*c
1	H	3	M	2	2	0.1250	0.375	0.250
2	M	2	M	2	2	0.1250	0.250	0.250
3	H	3	M	2	1	0.0625	0.188	0.125
4	H	3	H	3	2	0.1250	0.375	0.375
5	N	0	N	0	0	0.0000	0.000	0.000
6	M	2	M	2	1	0.0625	0.125	0.125
7	N	0	N	0	0	0.0000	0.000	0.000
8	N	0	N	0	0	0.0000	0.000	0.000
9	N	0	N	0	0	0.0000	0.000	0.000
10	H	3	M	2	3	0.1875	0.563	0.375
11	H	3	H	3	3	0.1875	0.563	0.563
12	H	3	H	3	2	0.1250	0.375	0.375
					16	1.0000	2.813	2.438

37. Emplace an Obstacle (17-2-0502)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 83.3 a*c	TTCF-f 66.7 b*c
1	H	3	M	2	1	0.5000	1.500	1.000
2	M	2	M	2	1	0.5000	1.000	1.000
					2	1.0000	2.500	2.000

38. Prepare for Chemical Attack (03-2-C0113)

NOT SUPPORTED

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	0	0.0000	0.000	0.000
2	N	0	N	0	0	0.0000	0.000	0.000
3	N	0	N	0	0	0.0000	0.000	0.000
					0	0.0000	0.000	0.000

39. Prepare for Nuclear Attack (03-2-C015)

NOT SUPPORTED

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	0	0.0000	0.000	0.000
2	N	0	N	0	0	0.0000	0.000	0.000
3	N	0	N	0	0	0.0000	0.000	0.000
4	N	0	N	0	0	0.0000	0.000	0.000
					0	0.0000	0.000	0.000

40. Respond to Initial Effects of Nuclear Attack

(03-2-C028) NOT SUPPORTED

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	0	0.0000	0.000	0.000
2	N	0	N	0	0	0.0000	0.000	0.000
3	N	0	N	0	0	0.0000	0.000	0.000
					0	0.0000	0.000	0.000

41. Respond to Residual Effects of Nuclear Attack

(03-2-C030) NOT SUPPORTED

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	0	0.0000	0.000	0.000
2	N	0	N	0	0	0.0000	0.000	0.000
3	N	0	N	0	0	0.0000	0.000	0.000
					0	0.0000	0.000	0.000

42. Perform Hasty Decontamination (03-2-C031)

NOT SUPPORTED

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	0	0.0000	0.000	0.000
2	N	0	N	0	0	0.0000	0.000	0.000
3	N	0	N	0	0	0.0000	0.000	0.000
4	N	0	N	0	0	0.0000	0.000	0.000
5	N	0	N	0	0	0.0000	0.000	0.000
6	N	0	N	0	0	0.0000	0.000	0.000
7	N	0	N	0	0	0.0000	0.000	0.000
8	N	0	N	0	0	0.0000	0.000	0.000
					0	0.0000	0.000	0.000

43. Coord Detailed Equipment Decontamination

(03-2-C033) NOT SUPPORTED

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	0	0.0000	0.000	0.000
2	N	0	N	0	0	0.0000	0.000	0.000
3	N	0	N	0	0	0.0000	0.000	0.000
4	N	0	N	0	0	0.0000	0.000	0.000
5	N	0	N	0	0	0.0000	0.000	0.000
6	N	0	N	0	0	0.0000	0.000	0.000
					0	0.0000	0.000	0.000

Figure 11

44. Defend Against Air Attack (Active) (44-2-C002)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 100.0 a*c	TTCF-f 66.7 b*c
1	H	3	M	2	2	0.2500	0.750	0.500
2	H	3	M	2	2	0.2500	0.750	0.500
3	H	3	M	2	2	0.2500	0.750	0.500
4	H	3	M	2	2	0.2500	0.750	0.500
					8	1.0000	3.000	2.000

45. Defend Against Air Attack (Passive) (44-2-C001) (17-2-3802)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 75.0 a*c	TTCF-f 58.3 b*c
1	H	3	M	2	2	0.2500	0.750	0.500
2	M	2	M	2	2	0.2500	0.500	0.500
3	M	2	L	1	2	0.2500	0.500	0.250
4	M	2	M	2	2	0.2500	0.500	0.500
					8	1.0000	2.250	1.750

46. Maintain Operation Security (17-2-0201)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 69.7 a*c	TTCF-f 78.8 b*c
1	M	2	L	1	0	0.0000	0.000	0.000
2	N	0	N	0	0	0.0000	0.000	0.000
3	M	2	M	2	3	0.2727	0.545	0.545
4	L	1	L	1	2	0.1818	0.182	0.182
5	H	3	H	3	3	0.2727	0.818	0.818
6	M	2	H	3	3	0.2727	0.545	0.818
7	L	1	L	1	0	0.0000	0.000	0.000
					11	1.0000	2.091	2.364

47. Perform Logistical Planning (17-2-0701)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 100.0 a*c	TTCF-f 33.3 b*c
1	H	3	L	1	1	1.0000	3.000	1.000
2	H	3	L	1	3	0.0000	0.000	0.000
					4	1.0000	3.000	1.000

48. Perform Tailgate Supply (17-2-0702)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 79.2 a*c	TTCF-f 75.0 b*c
1	H	3	H	3	1	0.1250	0.375	0.375
2	H	3	H	3	1	0.1250	0.375	0.375
3	M	2	H	3	2	0.2500	0.500	0.750
4	M	2	L	1	1	0.1250	0.250	0.125
5	M	2	M	2	2	0.2500	0.500	0.500
6	H	3	L	1	1	0.1250	0.375	0.125
					8	1.0000	2.375	2.250

49. Perform Service Station Supply (17-2-0703)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 88.9 a*c	TTCF-f 88.9 b*c
1	H	3	H	3	1	0.0667	0.200	0.200
2	H	3	H	3	2	0.1333	0.400	0.400
3	H	3	H	3	1	0.0667	0.200	0.200
4	L	1	L	1	1	0.0667	0.067	0.067
5	H	3	H	3	2	0.1333	0.400	0.400
6	M	2	M	2	1	0.0667	0.133	0.133
7	H	3	H	3	2	0.1333	0.400	0.400
8	M	2	M	2	2	0.1333	0.267	0.267
9	H	3	H	3	2	0.1333	0.400	0.400
10	H	3	H	3	1	0.0667	0.200	0.200
					15	1.0000	2.667	2.667

50. Consolodate on the Objective (17-2-0704)

CORE

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 70.4 a*c	TTCF-f 59.3 b*c
1	H	3	H	3	1	0.1111	0.333	0.333
2	H	3	L	1	2	0.2222	0.667	0.222
3	M	2	H	3	2	0.2222	0.444	0.667
4	L	1	L	1	3	0.3333	0.333	0.333
5	H	3	M	2	1	0.1111	0.333	0.222
					9	1.0000	2.111	1.778

Figure 12

51. Reorganize on the Objective (17-2-0706)

CORE

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 78.8 a*c	TTCF-f 75.8 b*c
1	H	3	H	3	2	0.1818	0.545	0.545
2	H	3	M	2	1	0.0909	0.273	0.182
3	M	2	H	3	2	0.1818	0.364	0.545
4	H	3	H	3	1	0.0909	0.273	0.273
5	H	3	L	1	1	0.0909	0.273	0.091
6	L	1	L	1	1	0.0909	0.091	0.091
7	M	2	M	2	1	0.0909	0.182	0.182
8	M	2	M	2	2	0.1818	0.364	0.364
					11	1.0000	2.364	2.273

52. Integrate Replacements (12-2-C007)

NOT SUPPORTED

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	0	0.0000	0.000	0.000
2	N	0	N	0	1	0.5000	0.000	0.000
3	N	0	N	0	1	0.5000	0.000	0.000
					2	1.0000	0.000	0.000

53. Provide Med Evac and Treatment of Casualties (17-2-0705) NOT SUPPORTED

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	0	0.0000	0.000	0.000
2	N	0	N	0	0	0.0000	0.000	0.000
3	N	0	N	0	1	0.5000	0.000	0.000
4	N	0	N	0	1	0.5000	0.000	0.000
5	N	0	N	0	0	0.0000	0.000	0.000
6	N	0	N	0	0	0.0000	0.000	0.000
7	N	0	N	0	0	0.0000	0.000	0.000
8	N	0	N	0	0	0.0000	0.000	0.000
					2	1.0000	0.000	0.000

54. Provide Maintenance Support (43-2-C003)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 58.3 a*c	TTCF-f 50.0 b*c
1	H	3	M	2	1	0.1250	0.375	0.250
2	M	2	L	1	1	0.1250	0.250	0.125
3	N	0	N	0	1	0.1250	0.000	0.000
4	M	2	L	1	1	0.1250	0.250	0.125
5	M	2	M	2	1	0.1250	0.250	0.250
6	L	1	M	2	1	0.1250	0.125	0.250
7	L	1	L	1	1	0.1250	0.125	0.125
8	H	3	H	3	1	0.1250	0.375	0.375
					8	1.0000	1.750	1.500

55. Process Enemy POWs (19-2-C004)

NOT SUPPORTED

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	0	0.0000	0.000	0.000
2	N	0	N	0	0	0.0000	0.000	0.000
3	N	0	N	0	0	0.0000	0.000	0.000
					0	0.0000	0.000	0.000

56. Prepare for Combat (17-2-0101)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 90.1 a*c	TTCF-f 43.2 b*c
1	H	3	L	1	2	0.0741	0.222	0.074
2	H	3	L	1	2	0.0741	0.222	0.074
3	H	3	L	1	2	0.0741	0.222	0.074
4	M	2	L	1	3	0.1111	0.222	0.111
5	H	3	L	1	2	0.0741	0.222	0.074
6	H	3	L	1	2	0.0741	0.222	0.074
7	M	2	M	2	3	0.1111	0.222	0.222
8	H	3	M	2	3	0.1111	0.333	0.222
9	H	3	L	1	2	0.0741	0.222	0.074
10	H	3	L	1	2	0.0741	0.222	0.074
11	H	3	M	2	2	0.0741	0.222	0.148
12	M	2	L	1	2	0.0741	0.148	0.074
					27	1.0000	2.704	1.296

57. Change Formation (71-TT--0001)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 80.0 a*c	TTCF-f 80.0 b*c
1	H	3	H	3	3	0.2000	0.600	0.600
2	N	0	N	0	3	0.2000	0.000	0.000
3	H	3	H	3	3	0.2000	0.600	0.600
4	H	3	H	3	3	0.2000	0.600	0.600
5	H	3	H	3	3	0.2000	0.600	0.600
					15	1.0000	2.400	2.400

58. Initiate Active (Left & Right) (71-TT-0002)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 61.1 a*c	TTCF-f 55.6 b*c
1	H	3	M	2	3	0.1667	0.500	0.333
2	N	0	N	0	3	0.1667	0.000	0.000
3	H	3	H	3	3	0.1667	0.500	0.500
4	N	0	N	0	3	0.1667	0.000	0.000
5	H	3	H	3	3	0.1667	0.500	0.500
6	M	2	M	2	3	0.1667	0.333	0.333
					18	1.0000	1.833	1.667

Figure 13

59. Execute Action on Contact (71-TT-0003)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 66.7 a*c	TTCF-f 66.7 b*c
1	H	3	H	3	3	0.3333	1.000	1.000
2	N	0	N	0	3	0.3333	0.000	0.000
3	H	3	H	3	3	0.3333	1.000	1.000
					9	1.0000	2.000	2.000

60. Execute Actions Upon Air Attack (71-TT-0004)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 88.9 a*c	TTCF-f 88.9 b*c
1	H	3	H	3	3	0.3333	1.000	1.000
2	M	2	M	2	3	0.3333	0.667	0.667
3	H	3	H	3	3	0.3333	1.000	1.000
					9	1.0000	2.667	2.667

61. React to Indirect Fire (71-TT-0005)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 66.7 a*c	TTCF-f 58.3 b*c
1	L	1	L	1	3	0.2500	0.250	0.250
2	M	2	M	2	3	0.2500	0.500	0.500
3	H	3	H	3	3	0.2500	0.750	0.750
4	M	2	L	1	3	0.2500	0.500	0.250
					12	1.0000	2.000	1.750

62. React to Direct Fire (71-TT-0006)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 100.0 a*c	TTCF-f 100.0 b*c
1	H	3	H	3	3	0.2000	0.600	0.600
2	H	3	H	3	3	0.2000	0.600	0.600
3	H	3	H	3	3	0.2000	0.600	0.600
4	H	3	H	3	3	0.2000	0.600	0.600
5	H	3	H	3	3	0.2000	0.600	0.600
					15	1.0000	3.000	3.000

63. React to Reinforced Obstacle (71-TT-007)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 97.0 a*c	TTCF-f 100.0 b*c
1	M	2	H	3	3	0.0909	0.182	0.273
2	H	3	H	3	3	0.0909	0.273	0.273
3	H	3	H	3	3	0.0909	0.273	0.273
4	H	3	H	3	3	0.0909	0.273	0.273
5	H	3	H	3	3	0.0909	0.273	0.273
6	H	3	H	3	3	0.0909	0.273	0.273
7	H	3	H	3	3	0.0909	0.273	0.273
8	H	3	H	3	3	0.0909	0.273	0.273
9	H	3	H	3	3	0.0909	0.273	0.273
10	H	3	H	3	3	0.0909	0.273	0.273
11	H	3	H	3	3	0.0909	0.273	0.273
					33	1.0000	2.909	3.000

Figure 14

ARTEP 17-487-30 MTP, Regimental Armored Cavalry Troop (1991/09/03)

1. Process Enemy Personnel and Equip (17-2-3801)

NOT SUPPORTED

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	0	0.0000	0.000	0.000
2	N	0	N	0	0	0.0000	0.000	0.000
3	N	0	N	0	0	0.0000	0.000	0.000
4	N	0	N	0	0	0.0000	0.000	0.000
5	N	0	N	0	0	0.0000	0.000	0.000
					0	0.0000	0.000	0.000

2. Employ OPSEC (17-2-1080)

NOT SUPPORTED

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	0	0.0000	0.000	0.000
2	N	0	N	0	0	0.0000	0.000	0.000
3	N	0	N	0	0	0.0000	0.000	0.000
4	N	0	N	0	0	0.0000	0.000	0.000
5	N	0	N	0	1	0.3333	0.000	0.000
6	N	0	N	0	0	0.0000	0.000	0.000
7	N	0	N	0	0	0.0000	0.000	0.000
8	N	0	N	0	0	0.0000	0.000	0.000
9	N	0	N	0	0	0.0000	0.000	0.000
10	N	0	N	0	0	0.0000	0.000	0.000
11	N	0	N	0	0	0.0000	0.000	0.000
12	N	0	N	0	0	0.0000	0.000	0.000
13	N	0	N	0	0	0.0000	0.000	0.000
14	N	0	N	0	0	0.0000	0.000	0.000
15	N	0	N	0	2	0.6667	0.000	0.000
					3	1.0000	0.000	0.000

3. Perform Route Reconnaissance (17-2-4000)

CORE

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 87.8 a*c	TTCF-f 83.3 b*c
1	H	3	H	3	1	0.0333	0.100	0.100
2	L	1	L	1	1	0.0333	0.033	0.033
3	M	2	L	1	3	0.1000	0.200	0.100
4	M	2	M	2	3	0.1000	0.200	0.200
5	H	3	H	3	3	0.1000	0.300	0.300
6	N	0	N	0	0	0.0000	0.000	0.000
7	N	0	N	0	0	0.0000	0.000	0.000
8	N	0	N	0	0	0.0000	0.000	0.000
9	H	3	H	3	2	0.0667	0.200	0.200
10	H	3	H	3	3	0.1000	0.300	0.300
11	M	2	H	3	2	0.0667	0.133	0.200
12	N	0	N	0	0	0.0000	0.000	0.000
13	M	2	L	1	1	0.0333	0.067	0.033
14	H	3	H	3	3	0.1000	0.300	0.300
15	H	3	H	3	3	0.1000	0.300	0.300
16	H	3	H	3	3	0.1000	0.300	0.300
17	H	3	M	2	2	0.0667	0.200	0.133
					30	1.0000	2.633	2.500

4. Perform Zone Reconnaissance (17-2-4010)

CORE

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 96.5 a*c	TTCF-f 84.2 b*c
1	H	3	H	3	2	0.1053	0.316	0.316
2	M	2	L	1	1	0.0526	0.105	0.053
3	H	3	L	1	2	0.1053	0.316	0.105
4	N	0	N	0	0	0.0000	0.000	0.000
5	M	2	L	1	0	0.0000	0.000	0.000
6	M	2	L	1	0	0.0000	0.000	0.000
7	H	3	H	3	2	0.1053	0.316	0.316
8	M	2	H	3	1	0.0526	0.105	0.158
9	N	0	N	0	0	0.0000	0.000	0.000
10	H	3	M	2	3	0.1579	0.474	0.316
11	H	3	H	3	3	0.1579	0.474	0.474
12	H	3	H	3	3	0.1579	0.474	0.474
13	H	3	H	3	2	0.1053	0.316	0.316
					19	1.0000	2.895	2.526

Figure 15

5. Perform Screen Operation (17-2-2225)

CORE

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 100.0 a*c	TTCF-f 94.4 b*c
1	H	3	H	3	2	0.1667	0.500	0.500
2	H	3	H	3	2	0.1667	0.500	0.500
3	H	3	H	3	3	0.2500	0.750	0.750
4	H	3	M	2	2	0.1667	0.500	0.333
5	H	3	H	3	3	0.2500	0.750	0.750
					12	1.0000	3.000	2.833

6. Perform Movement to Contact (17-2-9304)

CORE

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 97.9 a*c	TTCF-f 95.8 b*c
1	H	3	H	3	3	0.1875	0.563	0.563
2	H	3	H	3	2	0.1250	0.375	0.375
3	M	2	L	1	1	0.0625	0.125	0.063
4	H	3	H	3	1	0.0625	0.188	0.188
5	H	3	H	3	3	0.1875	0.563	0.563
6	H	3	H	3	3	0.1875	0.563	0.563
7	H	3	H	3	3	0.1875	0.563	0.563
					16	1.0000	2.938	2.875

7. Perform Actions on Contact (17-2-2360)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 86.7 a*c	TTCF-f 66.7 b*c
1	H	3	M	2	3	0.2000	0.600	0.400
2	H	3	M	2	3	0.2000	0.600	0.400
3	H	3	M	2	3	0.2000	0.600	0.400
4	H	3	H	3	3	0.2000	0.600	0.600
5	L	1	L	1	3	0.2000	0.200	0.200
					15	1.0000	2.600	2.000

8. Perform Hasty Attack (17-2-9305)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 93.3 a*c	TTCF-f 76.7 b*c
1	H	3	L	1	3	0.1000	0.300	0.100
2	H	3	L	1	3	0.1000	0.300	0.100
3	H	3	L	1	3	0.1000	0.300	0.100
4	H	3	M	2	3	0.1000	0.300	0.200
5	H	3	H	3	3	0.1000	0.300	0.300
6	H	3	H	3	3	0.1000	0.300	0.300
7	H	3	H	3	3	0.1000	0.300	0.300
8	M	2	H	3	3	0.1000	0.200	0.300
9	M	2	H	3	3	0.1000	0.200	0.300
10	H	3	H	3	3	0.1000	0.300	0.300
					30	1.0000	2.800	2.300

9. Develop Direct Fire Plan (17-2-0012)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 93.9 a*c	TTCF-f 33.3 b*c
1	H	3	L	1	3	0.2727	0.818	0.273
2	H	3	L	1	3	0.2727	0.818	0.273
3	M	2	L	1	2	0.1818	0.364	0.182
4	H	3	L	1	3	0.2727	0.818	0.273
					11	1.0000	2.818	1.000

10. Delay in Troop Sector (17-2-9264)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 90.9 a*c	TTCF-f 90.9 b*c
1	H	3	H	3	3	0.0682	0.205	0.205
2	H	3	H	3	3	0.0682	0.205	0.205
3	H	3	H	3	3	0.0682	0.205	0.205
4	L	1	M	2	3	0.0682	0.068	0.136
5	H	3	L	1	3	0.0682	0.205	0.068
6	H	3	H	3	2	0.0455	0.136	0.136
7	H	3	H	3	3	0.0682	0.205	0.205
8	H	3	H	3	3	0.0682	0.205	0.205
9	H	3	H	3	3	0.0682	0.205	0.205
10	H	3	H	3	3	0.0682	0.205	0.205
11	H	3	H	3	3	0.0682	0.205	0.205
12	H	3	H	3	3	0.0682	0.205	0.205
13	H	3	H	3	3	0.0682	0.205	0.205
14	M	2	M	2	3	0.0682	0.136	0.136
15	M	2	H	3	3	0.0682	0.136	0.205
					44	1.0000	2.727	2.727

Figure 16

11. Defend in Troop Sector (17-2-9263)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 97.1 a*c	TTCF-f 91.2 b*c
1	H	3	H	3	3	0.0882	0.265	0.265
2	H	3	M	2	3	0.0882	0.265	0.176
3	H	3	H	3	3	0.0882	0.265	0.265
4	H	3	H	3	3	0.0882	0.265	0.265
5	H	3	H	3	3	0.0882	0.265	0.265
6	H	3	H	3	1	0.0294	0.088	0.088
7	H	3	H	3	3	0.0882	0.265	0.265
8	H	3	H	3	3	0.0882	0.265	0.265
9	H	3	H	3	3	0.0882	0.265	0.265
10	H	3	H	3	3	0.0882	0.265	0.265
11	H	3	H	3	3	0.0882	0.265	0.265
12	M	2	L	1	3	0.0882	0.176	0.088
					34	1.0000	2.912	2.735

12. Defend a Battle Position (17-2-9260)

CORE

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 81.5 a*c	TTCF-f 70.4 b*c
1	H	3	L	1	2	0.1111	0.333	0.111
2	M	2	M	2	3	0.1667	0.333	0.333
3	M	2	M	2	2	0.1111	0.222	0.222
4	H	3	H	3	1	0.0556	0.167	0.167
5	M	2	M	2	3	0.1667	0.333	0.333
6	M	2	L	1	2	0.1111	0.222	0.111
7	H	3	H	3	3	0.1667	0.500	0.500
8	H	3	H	3	2	0.1111	0.333	0.333
					18	1.0000	2.444	2.111

13. Perform Tactical Road March (17-2-3806)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 90.2 a*c	TTCF-f 75.5 b*c
1	H	3	H	3	3	0.0882	0.265	0.265
2	H	3	H	3	3	0.0882	0.265	0.265
3	H	3	L	1	2	0.0588	0.176	0.059
4	H	3	L	1	2	0.0588	0.176	0.059
5	H	3	L	1	2	0.0588	0.176	0.059
6	H	3	H	3	3	0.0882	0.265	0.265
7	M	2	M	2	3	0.0882	0.176	0.176
8	H	3	M	2	3	0.0882	0.265	0.176
9	H	3	H	3	3	0.0882	0.265	0.265
10	L	1	L	1	3	0.0882	0.088	0.088
11	M	2	M	2	1	0.0294	0.059	0.059
12	H	3	H	3	3	0.0882	0.265	0.265
13	H	3	H	3	3	0.0882	0.265	0.265
					34	1.0000	2.706	2.265

14. Conduct Tactical Movement (17-2-3814)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 100.0 a*c	TTCF-f 95.5 b*c
1	H	3	H	3	3	0.0682	0.205	0.205
2	H	3	H	3	3	0.0682	0.205	0.205
3	H	3	H	3	3	0.0682	0.205	0.205
4	H	3	H	3	3	0.0682	0.205	0.205
5	H	3	H	3	3	0.0682	0.205	0.205
6	H	3	H	3	3	0.0682	0.205	0.205
7	H	3	H	3	2	0.0455	0.136	0.136
8	H	3	L	1	3	0.0682	0.205	0.068
9	H	3	H	3	3	0.0682	0.205	0.205
10	H	3	H	3	3	0.0682	0.205	0.205
11	H	3	H	3	3	0.0682	0.205	0.205
12	H	3	H	3	3	0.0682	0.205	0.205
13	H	3	H	3	3	0.0682	0.205	0.205
14	H	3	H	3	3	0.0682	0.205	0.205
15	H	3	H	3	3	0.0682	0.205	0.205
					44	1.0000	3.000	2.864

15. Occupy an Assembly Area (17-2-R331)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 57.4 a*c	TTCF-f 37.0 b*c
1	H	3	L	1	2	0.1111	0.333	0.111
2	H	3	L	1	2	0.1111	0.333	0.111
3	L	1	L	1	3	0.1667	0.167	0.167
4	L	1	L	1	1	0.0556	0.056	0.056
5	L	1	M	2	3	0.1667	0.167	0.333
6	N	0	N	0	3	0.1667	0.000	0.000
7	L	1	L	1	0	0.0000	0.000	0.000
8	H	3	L	1	2	0.1111	0.333	0.111
9	H	3	M	2	2	0.1111	0.333	0.222
					18	1.0000	1.722	1.111

16. Perform a Relief in Place (17-2-2904)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 82.1 a*c	TTCF-f 76.9 b*c
1	H	3	L	1	2	0.1538	0.462	0.154
2	H	3	H	3	3	0.2308	0.692	0.692
3	H	3	H	3	3	0.2308	0.692	0.692
4	M	2	M	2	2	0.1538	0.308	0.308
5	M	2	H	3	2	0.1538	0.308	0.462
6	N	0	N	0	1	0.0769	0.000	0.000
					13	1.0000	2.462	2.308

Figure 17

17. Perform Passage of Lines (1-2-2884)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 92.9 a*c	TTCF-f 58.3 b*c
1	H	3	M	2	3	0.1071	0.321	0.214
2	H	3	L	1	2	0.0714	0.214	0.071
3	H	3	L	1	2	0.0714	0.214	0.071
4	H	3	H	3	3	0.1071	0.321	0.321
5	H	3	H	3	3	0.1071	0.321	0.321
6	H	3	L	1	3	0.1071	0.321	0.107
7	M	2	M	2	3	0.1071	0.214	0.214
8	H	3	L	1	3	0.1071	0.321	0.107
9	H	3	L	1	3	0.1071	0.321	0.107
10	M	2	M	2	3	0.1071	0.214	0.214
					28	1.0000	2.786	1.750

18. Assist Passage of Lines (17-2-2880)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 92.9 a*c	TTCF-f 90.5 b*c
1	H	3	L	1	2	0.1429	0.429	0.143
2	H	3	H	3	3	0.2143	0.643	0.643
3	M	2	H	3	3	0.2143	0.429	0.643
4	H	3	H	3	3	0.2143	0.643	0.643
5	H	3	H	3	3	0.2143	0.643	0.643
					14	1.0000	2.786	2.714

19. Develop Fire Support Plan (17-2-2460)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 93.3 a*c	TTCF-f 20.0 b*c
1	H	3	L	1	1	0.2000	0.600	0.200
2	H	3	L	1	1	0.2000	0.600	0.200
3	M	2	L	1	1	0.2000	0.400	0.200
4	H	3	N	0	1	0.2000	0.600	0.000
5	H	3	N	0	1	0.2000	0.600	0.000
					5	1.0000	2.800	0.600

20. Conduct Hasty Water Crossing (17-2-3110)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 96.7 a*c	TTCF-f 90.0 b*c
1	H	3	L	1	2	0.0667	0.200	0.067
2	H	3	H	3	3	0.1000	0.300	0.300
3	H	3	H	3	3	0.1000	0.300	0.300
4	M	2	H	3	0	0.0000	0.000	0.000
5	H	3	M	2	2	0.0667	0.200	0.133
6	H	3	H	3	2	0.0667	0.200	0.200
7	H	3	H	3	3	0.1000	0.300	0.300
8	M	2	M	2	3	0.1000	0.200	0.200
9	H	3	H	3	3	0.1000	0.300	0.300
10	H	3	H	3	3	0.1000	0.300	0.300
11	H	3	H	3	3	0.1000	0.300	0.300
12	H	3	H	3	3	0.1000	0.300	0.300
					30	1.0000	2.900	2.700

21. Perform Hasty Obstacle Breaching (17-2-3070)

CORE

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 87.0 a*c	TTCF-f 85.5 b*c
1	H	3	M	2	2	0.0870	0.261	0.174
2	H	3	H	3	2	0.0870	0.261	0.261
3	M	2	H	3	2	0.0870	0.174	0.261
4	H	3	H	3	3	0.1304	0.391	0.391
5	H	3	M	2	1	0.0435	0.130	0.087
6	H	3	H	3	2	0.0870	0.261	0.261
7	L	1	H	3	2	0.0870	0.087	0.261
8	H	3	M	2	2	0.0870	0.261	0.174
9	H	3	H	3	3	0.1304	0.391	0.391
10	H	3	L	1	1	0.0435	0.130	0.043
11	N	0	N	0	1	0.0435	0.000	0.000
12	H	3	H	3	2	0.0870	0.261	0.261
13	H	3	H	3	0	0.0000	0.000	0.000
					23	1.0000	2.609	2.565

22. Develop Obstacle Plan (17-2-2657)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 100.0 a*c	TTCF-f 44.4 b*c
1	H	3	L	1	1	0.1667	0.500	0.167
2	H	3	L	1	1	0.1667	0.500	0.167
3	H	3	H	3	1	0.1667	0.500	0.500
4	H	3	L	1	1	0.1667	0.500	0.167
5	H	3	L	1	1	0.1667	0.500	0.167
6	H	3	L	1	1	0.1667	0.500	0.167
					6	1.0000	3.000	1.333

Figure 18

23. Prepare for OPNS in an NBC Environment (17-2-5260)

NOT SUPPORTED

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	1	0.1667	0.000	0.000
2	N	0	N	0	1	0.1667	0.000	0.000
3	N	0	N	0	1	0.1667	0.000	0.000
4	N	0	N	0	1	0.1667	0.000	0.000
5	N	0	N	0	1	0.1667	0.000	0.000
6	N	0	N	0	1	0.1667	0.000	0.000
					6	1.0000	0.000	0.000

24. Prepare for a Nuclear Attack (17-2-3819)

NOT SUPPORTED

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	0	0.0000	0.000	0.000
2	N	0	N	0	0	0.0000	0.000	0.000
3	N	0	N	0	0	0.0000	0.000	0.000
4	N	0	N	0	0	0.0000	0.000	0.000
					0	0.0000	0.000	0.000

25. Cross a Radiologically Contaminated Area (17-2-3818)

NOT SUPPORTED

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	0	0.0000	0.000	0.000
2	N	0	N	0	0	0.0000	0.000	0.000
3	N	0	N	0	0	0.0000	0.000	0.000
4	N	0	N	0	0	0.0000	0.000	0.000
					0	0.0000	0.000	0.000

26. Conduct a Radiological Survy (17-2-4045)

NOT SUPPORTED

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	0	0.0000	0.000	0.000
2	N	0	N	0	0	0.0000	0.000	0.000
3	N	0	N	0	0	0.0000	0.000	0.000
4	N	0	N	0	0	0.0000	0.000	0.000
					0	0.0000	0.000	0.000

27. Prepare for Friendly Nuclear Strike (17-2-3813)

NOT SUPPORTED

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	0	0.0000	0.000	0.000
2	N	0	N	0	0	0.0000	0.000	0.000
3	N	0	N	0	0	0.0000	0.000	0.000
4	N	0	N	0	0	0.0000	0.000	0.000
5	N	0	N	0	0	0.0000	0.000	0.000
					0	0.0000	0.000	0.000

28. Perform Radiological Decontamination (17-2-5840)

NOT SUPPORTED

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	0	0.0000	0.000	0.000
2	N	0	N	0	0	0.0000	0.000	0.000
3	N	0	N	0	0	0.0000	0.000	0.000
4	N	0	N	0	0	0.0000	0.000	0.000
					0	0.0000	0.000	0.000

29. Prepare for a Chemical Attack (17-2-3822)

NOT SUPPORTED

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	0	0.0000	0.000	0.000
2	N	0	N	0	0	0.0000	0.000	0.000
3	N	0	N	0	0	0.0000	0.000	0.000
4	N	0	N	0	0	0.0000	0.000	0.000
5	N	0	N	0	0	0.0000	0.000	0.000
					0	0.0000	0.000	0.000

30. Respond to a Chem Agent Attack (17-2-3823)

NOT SUPPORTED

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	0	0.0000	0.000	0.000
2	N	0	N	0	0	0.0000	0.000	0.000
3	N	0	N	0	0	0.0000	0.000	0.000
4	N	0	N	0	0	0.0000	0.000	0.000
5	N	0	N	0	0	0.0000	0.000	0.000
6	N	0	N	0	0	0.0000	0.000	0.000
7	N	0	N	0	0	0.0000	0.000	0.000
8	N	0	N	0	0	0.0000	0.000	0.000
9	N	0	N	0	0	0.0000	0.000	0.000
					0	0.0000	0.000	0.000

Figure 19

31. Cross a Chemically Contaminated Area (17-2-3824)

NOT SUPPORTED

T S	Capability a		Feedback b		Weight c		TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	0	0.0000	0.000	0.000
2	N	0	N	0	0	0.0000	0.000	0.000
3	N	0	N	0	0	0.0000	0.000	0.000
4	N	0	N	0	0	0.0000	0.000	0.000
					0	0.0000	0.000	0.000

32. Conduct a Chemical Survey (03-2-C310)

NOT SUPPORTED

T S	Capability a		Feedback b		Weight c		TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	0	0.0000	0.000	0.000
2	N	0	N	0	0	0.0000	0.000	0.000
3	N	0	N	0	0	0.0000	0.000	0.000
4	N	0	N	0	0	0.0000	0.000	0.000
5	N	0	N	0	0	0.0000	0.000	0.000
6	N	0	N	0	0	0.0000	0.000	0.000
					0	0.0000	0.000	0.000

33. Coordinate for Detailed Equip Decontamination (17-2-3805) NOT SUPPORTED

T S	Capability a		Feedback b		Weight c		TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	0	0.0000	0.000	0.000
2	N	0	N	0	0	0.0000	0.000	0.000
3	N	0	N	0	0	0.0000	0.000	0.000
4	N	0	N	0	0	0.0000	0.000	0.000
5	N	0	N	0	0	0.0000	0.000	0.000
6	N	0	N	0	0	0.0000	0.000	0.000
					0	0.0000	0.000	0.000

34. Perform Detailed Troop Decontamination (17-2-3817)

NOT SUPPORTED

T S	Capability a		Feedback b		Weight c		TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	0	0.0000	0.000	0.000
2	N	0	N	0	0	0.0000	0.000	0.000
3	N	0	N	0	0	0.0000	0.000	0.000
4	N	0	N	0	0	0.0000	0.000	0.000
					0	0.0000	0.000	0.000

35. Protect Supplies and Equip from Contamination (17-2-3816) NOT SUPPORTED

T S	Capability a		Feedback b		Weight c		TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	0	0.0000	0.000	0.000
2	N	0	N	0	0	0.0000	0.000	0.000
3	N	0	N	0	0	0.0000	0.000	0.000
					0	0.0000	0.000	0.000

36. Respond to Residual Effects of a Nuclear Attack (03-3-C327) NOT SUPPORTED

T S	Capability a		Feedback b		Weight c		TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	0	0.0000	0.000	0.000
2	N	0	N	0	0	0.0000	0.000	0.000
3	N	0	N	0	0	0.0000	0.000	0.000
4	N	0	N	0	0	0.0000	0.000	0.000
					0	0.0000	0.000	0.000

Figure 20

ARTEPs 7-3/4 MTP & 7-8 MTP, Mechanized Infantry Platoon/Squad

1. Execute Attack (7-3/4-1100)

CORE

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 97.0 a*c	TTCF-f 72.7 b*c
1	H	3	L	1	1	0.0455	0.136	0.045
2	H	3	M	2	1	0.0455	0.136	0.091
3	M	2	N	0	2	0.0909	0.182	0.000
4	H	3	M	2	3	0.1364	0.409	0.273
5	H	3	H	3	3	0.1364	0.409	0.409
6	H	3	M	2	3	0.1364	0.409	0.273
7	H	3	M	2	3	0.1364	0.409	0.273
8	H	3	H	3	3	0.1364	0.409	0.409
9	H	3	H	3	3	0.1364	0.409	0.409
					22	1.0000	2.909	2.182

2. Execute Assault (7-3/4-1103)

CORE

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 94.4 a*c	TTCF-f 66.7 b*c
1	H	3	L	1	3	0.1667	0.500	0.167
2	H	3	L	1	3	0.1667	0.500	0.167
3	M	2	H	3	3	0.1667	0.333	0.500
4	H	3	H	3	3	0.1667	0.500	0.500
5	H	3	M	2	3	0.1667	0.500	0.333
6	H	3	M	2	3	0.1667	0.500	0.333
					18	1.0000	2.833	2.000

3. Perform Movement to Contact (7-3/4-1101)

CORE

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 90.7 a*c	TTCF-f 66.7 b*c
1	H	3	L	1	1	0.0556	0.167	0.056
2	M	2	L	1	2	0.1111	0.222	0.111
3	H	3	H	3	3	0.1667	0.500	0.500
4	M	2	M	2	3	0.1667	0.333	0.333
5	H	3	L	1	3	0.1667	0.500	0.167
6	H	3	M	2	3	0.1667	0.500	0.333
7	H	3	H	3	3	0.1667	0.500	0.500
					18	1.0000	2.722	2.000

4. Perform Overwatch/Support by Fire (7-3/4-1108)

CORE

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 91.7 a*c	TTCF-f 88.1 b*c
1	H	3	H	3	3	0.1071	0.321	0.321
2	H	3	H	3	3	0.1071	0.321	0.321
3	M	2	L	1	1	0.0357	0.071	0.036
4	H	3	H	3	3	0.1071	0.321	0.321
5	M	2	M	2	3	0.1071	0.214	0.214
6	N	0	N	0	1	0.0357	0.000	0.000
7	H	3	H	3	3	0.1071	0.321	0.321
8	H	3	M	2	2	0.0714	0.214	0.143
9	H	3	H	3	3	0.1071	0.321	0.321
10	H	3	H	3	3	0.1071	0.321	0.321
11	H	3	H	3	3	0.1071	0.321	0.321
					28	1.0000	2.750	2.643

5. Execute Disengagement (7-3/4-1122)

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 89.4 a*c	TTCF-f 72.7 b*c
1	H	3	M	2	3	0.1364	0.409	0.273
2	M	2	M	2	3	0.1364	0.273	0.273
3	H	3	M	2	3	0.1364	0.409	0.273
4	M	2	M	2	3	0.1364	0.273	0.273
5	M	2	M	2	1	0.0455	0.091	0.091
6	H	3	H	3	1	0.0455	0.136	0.136
7	H	3	M	2	2	0.0909	0.273	0.182
8	H	3	H	3	3	0.1364	0.409	0.409
9	H	3	M	2	3	0.1364	0.409	0.273
					22	1.0000	2.682	2.182

6. Knock Out a Bunker (7-3/4-1113)

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 91.4 a*c	TTCF-f 86.7 b*c
1	M	2	H	3	3	0.1429	0.286	0.429
2	H	3	L	1	3	0.1429	0.429	0.143
3	H	3	H	3	2	0.0952	0.286	0.286
4	M	2	H	3	2	0.0952	0.190	0.286
5	H	3	M	2	1	0.0476	0.143	0.095
6	H	3	M	2	1	0.0476	0.143	0.095
7	H	3	H	3	3	0.1429	0.429	0.429
8	H	3	H	3	3	0.1429	0.429	0.429
9	H	3	H	3	3	0.1364	0.409	0.409
					21	0.9935	2.742	2.600

Figure 21

7. Clear Trench Line (7-3/4-1114)

NOT SUPPORTED

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	1	0.1250	0.000	0.000
2	N	0	N	0	1	0.1250	0.000	0.000
3	N	0	N	0	1	0.1250	0.000	0.000
4	N	0	N	0	3	0.3750	0.000	0.000
5	N	0	N	0	0	0.0000	0.000	0.000
6	N	0	N	0	1	0.1250	0.000	0.000
7	N	0	N	0	0	0.0000	0.000	0.000
8	N	0	N	0	0	0.0000	0.000	0.000
9	N	0	N	0	1	0.1250	0.000	0.000
					8	1.0000	0.000	0.000

8. Perform Raid (7-3/4-1102)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 93.1 a*c	TTCF-f 73.6 b*c
1	H	3	L	1	1	0.0208	0.063	0.021
2	H	3	L	1	3	0.0625	0.188	0.063
3	H	3	L	1	3	0.0625	0.188	0.063
4	H	3	L	1	3	0.0625	0.188	0.063
5	H	3	H	3	2	0.0417	0.125	0.125
6	H	3	L	1	3	0.0625	0.188	0.063
7	M	2	L	1	1	0.0208	0.042	0.021
8	H	3	H	3	3	0.0625	0.188	0.188
9	H	3	H	3	3	0.0625	0.188	0.188
10	H	3	M	2	3	0.0625	0.188	0.125
11	H	3	H	3	1	0.0208	0.063	0.063
12	H	3	H	3	3	0.0625	0.188	0.188
13	H	3	H	3	1	0.0208	0.063	0.063
14	L	1	M	2	3	0.0625	0.063	0.125
15	H	3	H	3	3	0.0625	0.188	0.188
16	H	3	H	3	3	0.0625	0.188	0.188
17	M	2	M	2	2	0.0417	0.083	0.083
18	H	3	H	3	3	0.0625	0.188	0.188
19	M	2	L	1	1	0.0208	0.042	0.021
20	H	3	H	3	3	0.0625	0.188	0.188
					48	1.0000	2.792	2.208

9. Perform Antiarmor Ambush (7-3/4-1143)

CORE

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 80.0 a*c
1	H	3	L	1	1	0.0400	0.120
2	H	3	H	3	3	0.1200	0.360
3	H	3	H	3	1	0.0400	0.120
4	H	3	H	3	3	0.1200	0.360
5	M	2	H	3	3	0.1200	0.240
6	M	2	H	3	1	0.0400	0.080
7	N	0	N	0	1	0.0400	0.000
8	H	3	H	3	3	0.1200	0.360
9	M	2	H	3	3	0.1200	0.240
10	M	2	H	3	1	0.0400	0.080
11	H	3	H	3	3	0.1200	0.360
12	L	1	L	1	2	0.0800	0.080
					25	1.0000	2.400

10. Perform Hasty Ambush (7-3/4-1144)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 82.6 a*c
1	M	2	M	2	3	0.1304	0.261
2	L	1	H	3	1	0.0435	0.043
3	M	2	M	2	1	0.0435	0.087
4	H	3	L	1	3	0.1304	0.391
5	M	2	M	2	3	0.1304	0.261
6	M	2	M	2	3	0.1304	0.261
7	H	3	M	2	3	0.1304	0.391
8	H	3	H	3	3	0.1304	0.391
9	H	3	M	2	3	0.1304	0.391
					23	1.0000	2.478

Figure 22

11. Perform Point Ambush (7-3/4-1145)

TS	Capability	a	Feedback		Weight	c	TTCF-e 80.3 a*c	TTCF-f 61.5 b*c
1	H	3	L	1	1	0.0256	0.077	0.026
2	H	3	L	1	1	0.0256	0.077	0.026
3	H	3	L	1	3	0.0769	0.231	0.077
4	H	3	L	1	1	0.0256	0.077	0.026
5	H	3	L	1	2	0.0513	0.154	0.051
6	M	2	M	2	3	0.0769	0.154	0.154
7	M	2	M	2	2	0.0513	0.103	0.103
8	N	0	N	0	2	0.0513	0.000	0.000
9	M	2	H	3	3	0.0769	0.154	0.231
10	M	2	L	1	3	0.0769	0.154	0.077
11	M	2	H	3	3	0.0769	0.154	0.231
12	H	3	H	3	3	0.0769	0.231	0.231
13	H	3	M	2	1	0.0256	0.077	0.051
14	N	0	N	0	0	0.0000	0.000	0.000
15	H	3	H	3	3	0.0769	0.231	0.231
16	H	3	M	2	2	0.0513	0.154	0.103
17	M	2	L	1	3	0.0769	0.154	0.077
18	H	3	M	2	3	0.0769	0.231	0.154
					39	1.0000	2.410	1.846

12. Execute Defense (7-3/4-1115)

CORE

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 85.1 a*c	TTCF-f 78.2 b*c
1	M	2	L	1	3	0.1034	0.207	0.103
2	M	2	L	1	2	0.0690	0.138	0.069
3	M	2	M	2	3	0.1034	0.207	0.207
4	H	3	L	1	0	0.0000	0.000	0.000
5	H	3	L	1	1	0.0345	0.103	0.034
6	L	1	L	1	0	0.0000	0.000	0.000
7	L	1	L	1	0	0.0000	0.000	0.000
8	L	1	L	1	1	0.0345	0.034	0.034
9	H	3	L	1	1	0.0345	0.103	0.034
10	M	2	M	2	0	0.0000	0.000	0.000
11	H	3	H	3	3	0.1034	0.310	0.310
12	H	3	H	3	3	0.1034	0.310	0.310
13	M	2	H	3	3	0.1034	0.207	0.310
14	H	3	H	3	3	0.1034	0.310	0.310
15	H	3	H	3	3	0.1034	0.310	0.310
16	H	3	H	3	3	0.1034	0.310	0.310
					29	1.0000	2.552	2.345

13. Occupy Assembly Area (7-3/4-1136)

CORE

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 75.0 a*c	TTCF-f 50.0 b*c
1	H	3	M	2	1	0.2500	0.750	0.500
2	H	3	M	2	1	0.2500	0.750	0.500
3	M	2	L	1	1	0.2500	0.500	0.250
4	L	1	L	1	1	0.2500	0.250	0.250
5	H	3	L	1	0	0.0000	0.000	0.000
					4	1.0000	2.250	1.500

14. Move Tactically (7-3/4-1134)

CORE

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 90.9 a*c	TTCF-f 88.9 b*c
1	H	3	L	1	1	0.0303	0.091	0.030
2	H	3	H	3	3	0.0909	0.273	0.273
3	H	3	H	3	3	0.0909	0.273	0.273
4	H	3	H	3	3	0.0909	0.273	0.273
5	H	3	H	3	3	0.0909	0.273	0.273
6	H	3	H	3	3	0.0909	0.273	0.273
7	H	3	H	3	3	0.0909	0.273	0.273
8	H	3	H	3	2	0.0606	0.182	0.182
9	M	2	M	2	3	0.0909	0.182	0.182
10	L	1	L	1	3	0.0909	0.091	0.091
11	H	3	H	3	3	0.0909	0.273	0.273
12	H	3	H	3	3	0.0909	0.273	0.273
					33	1.0000	2.727	2.667

15. Perform Actions at Danger Areas (7-3/4-1135)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 94.4 a*c	TTCF-f 59.3 b*c
1	M	2	L	1	1	0.0556	0.111	0.056
2	H	3	L	1	3	0.1667	0.500	0.167
3	H	3	M	2	3	0.1667	0.500	0.333
4	H	3	M	2	3	0.1667	0.500	0.333
5	M	2	M	2	2	0.1111	0.222	0.222
6	H	3	M	2	3	0.1667	0.500	0.333
7	H	3	M	2	3	0.1667	0.500	0.333
					18	1.0000	2.833	1.778

Figure 23

16. Perform Tactical Road March (7-3/4-1123)

CORE

TS	Capability a		Feedback b		Weight c		TTCF-e 61.9 a*c	TTCF-f 66.7 b*c
1	H	3	L	1	1	0.0714	0.214	0.071
2	M	2	N	0	1	0.0714	0.143	0.000
3	N	0	N	0	1	0.0714	0.000	0.000
4	H	3	H	3	3	0.2143	0.643	0.643
5	N	0	N	0	2	0.1429	0.000	0.000
6	H	3	H	3	3	0.2143	0.643	0.643
7	L	1	H	3	3	0.2143	0.214	0.643
					14	1.0000	1.857	2.000

17. Perform Passage of Lines (7-3/4-1125)

TS	Capability a		Feedback b		Weight c		TTCF-e 86.0 a*c	TTCF-f 54.4 b*c
1	H	3	L	1	1	0.0526	0.158	0.053
2	M	2	L	1	1	0.0526	0.105	0.053
3	M	2	L	1	1	0.0526	0.105	0.053
4	H	3	L	1	3	0.1579	0.474	0.158
5	L	1	M	2	3	0.1579	0.158	0.316
6	H	3	H	3	1	0.0526	0.158	0.158
7	H	3	M	2	3	0.1579	0.474	0.316
8	H	3	L	1	0	0.0000	0.000	0.000
9	H	3	H	3	1	0.0526	0.158	0.158
10	H	3	M	2	1	0.0526	0.158	0.105
11	H	3	L	1	3	0.1579	0.474	0.158
12	H	3	M	2	1	0.0526	0.158	0.105
					19	1.0000	2.579	1.632

18. Clear a Building (7-3/4-1110)

NOT SUPPORTED

TS	Capability a		Feedback b		Weight c		TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	1	0.0714	0.000	0.000
2	N	0	N	0	1	0.0714	0.000	0.000
3	N	0	N	0	3	0.2143	0.000	0.000
4	N	0	N	0	2	0.1429	0.000	0.000
5	N	0	N	0	3	0.2143	0.000	0.000
6	N	0	N	0	1	0.0714	0.000	0.000
7	N	0	N	0	0	0.0000	0.000	0.000
8	N	0	N	0	3	0.2143	0.000	0.000
					14	1.0000	0.000	0.000

19. Defend MOUT/Building (7-3/4-1118)

NOT SUPPORTED

TS	Capability a		Feedback b		Weight c		TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	1	0.0625	0.000	0.000
2	N	0	N	0	2	0.1250	0.000	0.000
3	N	0	N	0	1	0.0625	0.000	0.000
4	N	0	N	0	1	0.0625	0.000	0.000
5	N	0	N	0	0	0.0000	0.000	0.000
6	N	0	N	0	1	0.0625	0.000	0.000
7	N	0	N	0	0	0.0000	0.000	0.000
8	N	0	N	0	0	0.0000	0.000	0.000
9	N	0	N	0	1	0.0625	0.000	0.000
10	N	0	N	0	1	0.0625	0.000	0.000
11	N	0	N	0	0	0.0000	0.000	0.000
12	N	0	N	0	1	0.0625	0.000	0.000
13	N	0	N	0	1	0.0625	0.000	0.000
14	N	0	N	0	3	0.1875	0.000	0.000
15	N	0	N	0	3	0.1875	0.000	0.000
					16	1.0000	0.000	0.000

20. Perform Stay-Behind Operation(7-3/4-1116)

TS	Capability a		Feedback b		Weight c		TTCF-e 87.2 a*c	TTCF-f 51.3 b*c
1	M	2	L	1	1	0.0769	0.154	0.077
2	H	3	L	1	3	0.2308	0.692	0.231
3	M	2	L	1	1	0.0769	0.154	0.077
4	H	3	L	1	1	0.0769	0.231	0.077
5	M	2	M	2	3	0.2308	0.462	0.462
6	H	3	M	2	3	0.2308	0.692	0.462
7	H	3	M	2	1	0.0769	0.231	0.154
					13	1.0000	2.615	1.538

21. Perform Linkup (7-3/4-1128)

TS	Capability a		Feedback b		Weight c		TTCF-e 94.9 a*c	TTCF-f 82.1 b*c
1	H	3	H	3	1	0.0769	0.231	0.231
2	M	2	H	3	1	0.0769	0.154	0.231
3	H	3	M	2	3	0.2308	0.692	0.462
4	H	3	H	3	3	0.2308	0.692	0.692
5	M	2	M	2	1	0.0769	0.154	0.154
6	H	3	H	3	1	0.0769	0.231	0.231
7	H	3	M	2	3	0.2308	0.692	0.462
					13	1.0000	2.846	2.462

Figure 24

22. Perform Infiltration/Exfiltration (7-3/4-1137)

T S	Capability a		Feedback b		Weight c		TTCF-e 81.0 a*c	TTCF-f 81.0 b*c
1	M	2	M	2	1	0.1429	0.286	0.286
2	M	2	M	2	3	0.4286	0.857	0.857
3	H	3	H	3	3	0.4286	1.286	1.286
					7	1.0000	2.429	2.429

23. Take Actions on Contact (7-3/4-1107)

CORE

T S	Capability a		Feedback b		Weight c		TTCF-e 85.7 a*c	TTCF-f 50.0 b*c
1	M	2	M	2	3	0.2143	0.429	0.429
2	M	2	N	0	3	0.2143	0.429	0.000
3	H	3	N	0	2	0.1429	0.429	0.000
4	H	3	M	2	3	0.2143	0.643	0.429
5	H	3	H	3	3	0.2143	0.643	0.643
					14	1.0000	2.571	1.500

24. Break Contact (7-3/4-1111)

CORE

T S	Capability a		Feedback b		Weight c		TTCF-e 83.3 a*c	TTCF-f 77.8 b*c
1	H	3	H	3	3	0.1667	0.500	0.500
2	H	3	H	3	3	0.1667	0.500	0.500
3	N	0	N	0	3	0.1667	0.000	0.000
4	H	3	H	3	3	0.1667	0.500	0.500
5	H	3	H	3	3	0.1667	0.500	0.500
6	H	3	M	2	3	0.1667	0.500	0.333
					18	1.0000	2.500	2.333

25. React to Ambush (7-3/4-1112)

T S	Capability a		Feedback b		Weight c		TTCF-e 87.5 a*c	TTCF-f 85.4 b*c
1	M	2	H	3	3	0.1875	0.375	0.563
2	H	3	M	2	3	0.1875	0.563	0.375
3	M	2	M	2	3	0.1875	0.375	0.375
4	H	3	H	3	3	0.1875	0.563	0.563
5	H	3	H	3	3	0.1875	0.563	0.563
6	H	3	M	2	1	0.0625	0.188	0.125
					16	1.0000	2.625	2.563

26. Perform Delay (7-3/4-1119)

T S	Capability a		Feedback b		Weight c		TTCF-e 95.8 a*c	TTCF-f 87.5 b*c
1	H	3	L	1	1	0.1250	0.375	0.125
2	M	2	M	2	1	0.1250	0.250	0.250
3	H	3	H	3	3	0.3750	1.125	1.125
4	H	3	H	3	3	0.3750	1.125	1.125
					8	1.0000	2.875	2.625

27. Perform Relief Operations (7-3/4-1124)

T S	Capability a		Feedback b		Weight c		TTCF-e 91.2 a*c	TTCF-f 57.9 b*c
1	H	3	L	1	1	0.0526	0.158	0.053
2	H	3	L	1	1	0.0526	0.158	0.053
3	H	3	L	1	3	0.1579	0.474	0.158
4	H	3	M	2	2	0.1053	0.316	0.211
5	H	3	M	2	2	0.1053	0.316	0.211
6	M	2	L	1	3	0.1579	0.316	0.158
7	H	3	M	2	3	0.1579	0.474	0.316
8	L	1	M	2	1	0.0526	0.053	0.105
9	H	3	H	3	3	0.1579	0.474	0.474
					19	1.0000	2.737	1.737

28. Perform Airborne Assault (7-3/4-1127)

NOT SUPPORTED

T S	Capability a		Feedback b		Weight c		TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	0	0.0000	0.000	0.000
2	N	0	N	0	0	0.0000	0.000	0.000
3	N	0	N	0	0	0.0000	0.000	0.000
4	N	0	N	0	0	0.0000	0.000	0.000
					0	0.0000	0.000	0.000

29. Perform Opns w/Armored Veh (7-3/4-1140)

T S	Capability a		Feedback b		Weight c		TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	H	3	L	1	0	0.0000	0.000	0.000
2	H	3	L	1	0	0.0000	0.000	0.000
3	H	3	H	3	0	0.0000	0.000	0.000
4	N	0	N	0	0	0.0000	0.000	0.000
					0	0.0000	0.000	0.000

Figure 25

30. Perform Air Assault (7-3/4-1126)

NOT SUPPORTED

T S	Capability a		Feedback b		Weight c		TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	0	0.0000	0.000	0.000
2	N	0	N	0	0	0.0000	0.000	0.000
3	N	0	N	0	0	0.0000	0.000	0.000
4	N	0	N	0	0	0.0000	0.000	0.000
5	N	0	N	0	0	0.0000	0.000	0.000
6	N	0	N	0	0	0.0000	0.000	0.000
7	N	0	N	0	0	0.0000	0.000	0.000
8	N	0	N	0	0	0.0000	0.000	0.000
					0	0.0000	0.000	0.000

31. Cross Water Obstacles (7-3/4-1131)

NOT SUPPORTED

T S	Capability a		Feedback b		Weight c		TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	0	0.0000	0.000	0.000
2	N	0	N	0	0	0.0000	0.000	0.000
3	N	0	N	0	0	0.0000	0.000	0.000
4	N	0	N	0	0	0.0000	0.000	0.000
5	N	0	N	0	0	0.0000	0.000	0.000
6	N	0	N	0	0	0.0000	0.000	0.000
7	N	0	N	0	0	0.0000	0.000	0.000
8	N	0	N	0	0	0.0000	0.000	0.000
9	N	0	N	0	0	0.0000	0.000	0.000
10	N	0	N	0	0	0.0000	0.000	0.000
11	N	0	N	0	0	0.0000	0.000	0.000
					0	0.0000	0.000	0.000

32. Employ Fire Support (7-3/4-1200)

CORE

T S	Capability a		Feedback b		Weight c		TTCF-e 96.2 a*c	TTCF-f 48.7 b*c
1	H	3	L	1	1	0.0385	0.115	0.038
2	H	3	L	1	3	0.1154	0.346	0.115
3	H	3	M	2	3	0.1154	0.346	0.231
4	H	3	L	1	3	0.1154	0.346	0.115
5	H	3	L	1	3	0.1154	0.346	0.115
6	H	3	L	1	3	0.1154	0.346	0.115
7	H	3	L	1	3	0.1154	0.346	0.115
8	H	3	L	1	1	0.0385	0.115	0.038
9	M	2	M	2	3	0.1154	0.231	0.231
10	H	3	H	3	3	0.1154	0.346	0.346
					26	1.0000	2.885	1.462

33. Employ Direct Fire Support (7-3-4201)

CORE

T S	Capability a		Feedback b		Weight c		TTCF-e 100.0 a*c	TTCF-f 80.0 b*c
1	H	3	L	1	3	0.1000	0.300	0.100
2	H	3	L	1	3	0.1000	0.300	0.100
3	H	3	M	2	3	0.1000	0.300	0.200
4	H	3	M	2	3	0.1000	0.300	0.200
5	H	3	H	3	3	0.1000	0.300	0.300
6	H	3	H	3	3	0.1000	0.300	0.300
7	H	3	H	3	3	0.1000	0.300	0.300
8	H	3	H	3	3	0.1000	0.300	0.300
9	H	3	H	3	3	0.1000	0.300	0.300
10	H	3	H	3	3	0.1000	0.300	0.300
					30	1.0000	3.000	2.400

34. Reconnoiter Zone (7-3-1004)

T S	Capability a		Feedback b		Weight c		TTCF-e 100.0 a*c	TTCF-f 66.7 b*c
1	H	3	L	1	1	0.0667	0.200	0.067
2	H	3	L	1	1	0.0667	0.200	0.067
3	H	3	L	1	1	0.0667	0.200	0.067
4	H	3	H	3	3	0.2000	0.600	0.600
5	H	3	M	2	3	0.2000	0.600	0.400
6	H	3	L	1	3	0.2000	0.600	0.200
7	H	3	H	3	3	0.2000	0.600	0.600
					15	1.0000	3.000	2.000

35. Reconnoiter Area (7-3/4-1003)

CORE

T S	Capability a		Feedback b		Weight c		TTCF-e 85.2 a*c	TTCF-f 53.7 b*c
1	H	3	L	1	1	0.0556	0.167	0.056
2	H	3	L	1	3	0.1667	0.500	0.167
3	H	3	H	3	3	0.1667	0.500	0.500
4	H	3	L	1	3	0.1667	0.500	0.167
5	M	2	M	2	2	0.1111	0.222	0.222
6	M	2	M	2	3	0.1667	0.333	0.333
7	M	2	L	1	3	0.1667	0.333	0.167
					18	1.0000	2.556	1.611

36. Reconnoiter Route (7-3-1005)

T S	Capability a		Feedback b		Weight c		TTCF-e 97.0 a*c	TTCF-f 60.6 b*c
1	H	3	L	1	1	0.0909	0.273	0.091
2	H	3	H	3	3	0.2727	0.818	0.818
3	H	3	M	2	3	0.2727	0.818	0.545
4	M	2	L	1	1	0.0909	0.182	0.091
5	H	3	L	1	3	0.2727	0.818	0.273
					11	1.0000	2.909	1.818

Figure 26

37. Perform Surveillance from an OP (7-3/4-1008)

CORE

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 61.1 a*c	TTCF-f 33.3 b*c
1	H	3	L	1	1	0.1667	0.500	0.167
2	L	1	L	1	1	0.1667	0.167	0.167
3	L	1	L	1	1	0.1667	0.167	0.167
4	M	2	L	1	3	0.5000	1.000	0.500
					6	1.0000	1.833	1.000

38. Perform a Screen (7-3-1006)

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 88.9 a*c	TTCF-f 100.0 b*c
1	H	3	H	3	3	0.3333	1.000	1.000
2	H	3	H	3	3	0.3333	1.000	1.000
3	M	2	H	3	3	0.3333	0.667	1.000
					9	1.0000	2.667	3.000

39. Breach an Obstacle (7-3/4-1402)

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 66.7 a*c	TTCF-f 44.4 b*c
1	H	3	L	1	1	0.3333	1.000	0.333
2	M	2	N	0	1	0.3333	0.667	0.000
3	L	1	H	3	1	0.3333	0.333	1.000
					3	1.0000	2.000	1.333

40. Perform Waterborne Opns (7-3/4-1008)

NOT SUPPORTED

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	0	0.0000	0.000	0.000
2	N	0	N	0	0	0.0000	0.000	0.000
3	N	0	N	0	0	0.0000	0.000	0.000
4	N	0	N	0	0	0.0000	0.000	0.000
5	N	0	N	0	0	0.0000	0.000	0.000
6	N	0	N	0	0	0.0000	0.000	0.000
7	N	0	N	0	0	0.0000	0.000	0.000
8	N	0	N	0	0	0.0000	0.000	0.000
9	N	0	N	0	0	0.0000	0.000	0.000
10	N	0	N	0	0	0.0000	0.000	0.000
11	N	0	N	0	0	0.0000	0.000	0.000
12	N	0	N	0	0	0.0000	0.000	0.000
					0	0.0000	0.000	0.000

41. Perform NBC Operations (7-3/4-1406)

NOT SUPPORTED

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	1	0.0556	0.000	0.000
2	N	0	N	0	0	0.0000	0.000	0.000
3	N	0	N	0	1	0.0556	0.000	0.000
4	N	0	N	0	1	0.0556	0.000	0.000
5	N	0	N	0	0	0.0000	0.000	0.000
6	N	0	N	0	0	0.0000	0.000	0.000
7	N	0	N	0	1	0.0556	0.000	0.000
8	N	0	N	0	0	0.0000	0.000	0.000
9	N	0	N	0	1	0.0556	0.000	0.000
10	N	0	N	0	3	0.1667	0.000	0.000
11	N	0	N	0	1	0.0556	0.000	0.000
12	N	0	N	0	3	0.1667	0.000	0.000
13	N	0	N	0	3	0.1667	0.000	0.000
14	N	0	N	0	0	0.0000	0.000	0.000
15	N	0	N	0	0	0.0000	0.000	0.000
16	N	0	N	0	3	0.1667	0.000	0.000
					18	1.0000	0.000	0.000

42. Construct an Obstacle (7-3-1404)

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 97.2 a*c	TTCF-f 52.8 b*c
1	H	3	L	1	3	0.2500	0.750	0.250
2	H	3	M	2	1	0.0833	0.250	0.167
3	H	3	L	1	1	0.0833	0.250	0.083
4	M	2	L	1	0	0.0000	0.000	0.000
5	H	3	L	1	3	0.2500	0.750	0.250
6	M	2	M	2	0	0.0000	0.000	0.000
7	H	3	H	3	3	0.2500	0.750	0.750
8	M	2	L	1	1	0.0833	0.167	0.083
					12	1.0000	2.917	1.583

43. Maintain Operations Security (7-3/4-1409)

NOT SUPPORTED

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	3	0.2727	0.000	0.000
2	N	0	N	0	3	0.2727	0.000	0.000
3	N	0	N	0	3	0.2727	0.000	0.000
4	N	0	N	0	1	0.0909	0.000	0.000
5	N	0	N	0	1	0.0909	0.000	0.000
					11	1.0000	0.000	0.000

Figure 27

44. Establish a Roadblock/Checkpoint (7-3/4-1401)

NOT SUPPORTED

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	1	0.0714	0.000	0.000
2	N	0	N	0	1	0.0714	0.000	0.000
3	N	0	N	0	3	0.2143	0.000	0.000
4	N	0	N	0	1	0.0714	0.000	0.000
5	N	0	N	0	0	0.0000	0.000	0.000
6	N	0	N	0	1	0.0714	0.000	0.000
7	N	0	N	0	3	0.2143	0.000	0.000
8	N	0	N	0	1	0.0714	0.000	0.000
9	N	0	N	0	3	0.2143	0.000	0.000
10	N	0	N	0	0	0.0000	0.000	0.000
					14	1.0000	0.000	0.000

45. Conduct Initial Breach of a Mined Wire Obstacle (7-3/4-1403) CORE

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 81.1 a*c	TTCF-f 73.0 b*c
1	M	2	H	3	3	0.0811	0.162	0.243
2	H	3	L	1	3	0.0811	0.243	0.081
3	H	3	L	1	3	0.0811	0.243	0.081
4	H	3	L	1	3	0.0811	0.243	0.081
5	H	3	H	3	3	0.0811	0.243	0.243
6	N	0	N	0	3	0.0811	0.000	0.000
7	N	0	N	0	1	0.0270	0.000	0.000
8	M	2	H	3	3	0.0811	0.162	0.243
9	H	3	H	3	3	0.0811	0.243	0.243
10	H	3	H	3	3	0.0811	0.243	0.243
11	M	2	M	2	0	0.0000	0.000	0.000
12	H	3	H	3	3	0.0811	0.243	0.243
13	N	0	N	0	0	0.0000	0.000	0.000
14	M	2	H	3	3	0.0811	0.162	0.243
15	H	3	H	3	3	0.0811	0.243	0.243
					37	1.0000	2.432	2.189

46. Defend Against Air Attack (7-3/4-1301)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 94.7 a*c	TTCF-f 78.9 b*c
1	H	3	H	3	3	0.1579	0.474	0.474
2	M	2	L	1	3	0.1579	0.316	0.158
3	H	3	H	3	1	0.0526	0.158	0.158
4	H	3	H	3	3	0.1579	0.474	0.474
5	H	3	H	3	3	0.1579	0.474	0.474
6	H	3	M	2	3	0.1579	0.474	0.316
7	H	3	M	2	3	0.1579	0.474	0.316
					19	1.0000	2.842	2.368

47. Perform Combat Service Support Operations (7-3/4-1501)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 66.7 a*c	TTCF-f 36.7 b*c
1	H	3	M	2	3	0.1500	0.450	0.300
2	M	2	L	1	1	0.0500	0.100	0.050
3	M	2	L	1	1	0.0500	0.100	0.050
4	H	3	L	1	3	0.1500	0.450	0.150
5	M	2	M	2	3	0.1500	0.300	0.300
6	N	0	N	0	1	0.0500	0.000	0.000
7	H	3	L	1	2	0.1000	0.300	0.100
8	N	0	N	0	0	0.0000	0.000	0.000
9	N	0	N	0	0	0.0000	0.000	0.000
10	N	0	N	0	3	0.1500	0.000	0.000
11	M	2	L	1	3	0.1500	0.300	0.150
12	N	0	N	0	0	0.0000	0.000	0.000
					20	1.0000	2.000	1.100

48. Process Enemy POW/Captured Materiel (7-3/4-1503) NOT SUPPORTED

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	0	0.0000	0.000	0.000
2	N	0	N	0	0	0.0000	0.000	0.000
3	N	0	N	0	0	0.0000	0.000	0.000
4	N	0	N	0	1	1.0000	0.000	0.000
5	N	0	N	0	0	0.0000	0.000	0.000
6	N	0	N	0	0	0.0000	0.000	0.000
					1	1.0000	0.000	0.000

Figure 28

ARTEP 17-237-10 MTP, Tank Platoon (1996/07/09)

1. Conduct Troop-Leading Procedures (17-3-0065)

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 94.4 a*c	TTCF-f 44.4 b*c
1	H	3	L	1	1	0.08333	0.250	0.083
2	H	3	L	1	1	0.08333	0.250	0.083
3	H	3	L	1	1	0.08333	0.250	0.083
4	H	3	M	2	2	0.16667	0.500	0.333
5	H	3	M	2	2	0.16667	0.500	0.333
6	H	3	L	1	2	0.16667	0.500	0.167
7	H	3	L	1	2	0.16667	0.500	0.167
8	L	1	L	1	1	0.08333	0.083	0.083
					12	1	2.833	1.333

2. Conduct Assembly Area Activities (17-3-2000)

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 68.8 a*c	TTCF-f 54.2 b*c
1	H	3	L	1	1	0.063	0.188	0.063
2	N	0	N	0	2	0.125	0.000	0.000
3	M	2	H	3	2	0.125	0.250	0.375
4	M	2	H	3	2	0.125	0.250	0.375
5	H	3	L	1	1	0.063	0.188	0.063
6	M	2	M	2	2	0.125	0.250	0.250
7	H	3	L	1	2	0.125	0.375	0.125
8	M	2	L	1	1	0.063	0.125	0.063
9	N	0	N	0	0	0.000	0.000	0.000
10	H	3	L	1	1	0.063	0.188	0.063
11	M	2	M	2	2	0.125	0.250	0.250
					16	1	2.063	1.625

3. Conduct Linkup (17-3-2760)

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 91.7 a*c	TTCF-f 66.7 b*c
1	H	3	L	1	1	0.125	0.375	0.125
2	M	2	M	2	2	0.250	0.500	0.500
3	H	3	H	3	2	0.250	0.750	0.750
4	H	3	L	1	2	0.250	0.750	0.250
5	H	3	H	3	1	0.125	0.375	0.375
					8	1	2.750	2.000

4. Establish Observation Posts (17-3-1039)

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 90.9 a*c	TTCF-f 51.5 b*c
1	H	3	M	2	2	0.18182	0.545	0.364
2	H	3	L	1	3	0.27273	0.818	0.273
3	H	3	L	1	1	0.09091	0.273	0.091
4	M	2	H	3	1	0.09091	0.182	0.273
5	M	2	L	1	1	0.09091	0.182	0.091
6	M	2	L	1	1	0.09091	0.182	0.091
7	H	3	M	2	2	0.18182	0.545	0.364
8	N	0	N	0	0	0	0.000	0.000
					11	1	2.727	1.545

5. Conduct Bypass Operations (17-3-2420)

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 100.0 a*c	TTCF-f 100.0 b*c
1	H	3	H	3	2	0.400	1.200	1.200
2	H	3	H	3	2	0.400	1.200	1.200
3	H	3	H	3	1	0.200	0.600	0.600
					5	1	3.000	3.000

6. Conduct Convoy Escort (17-3-2320)

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 94.9 a*c	TTCF-f 79.5 b*c
1	H	3	L	1	2	0.15385	0.462	0.154
2	M	2	L	1	2	0.15385	0.308	0.154
3	H	3	H	3	3	0.23077	0.692	0.692
4	H	3	H	3	1	0.07692	0.231	0.231
5	H	3	H	3	2	0.15385	0.462	0.462
6	H	3	H	3	2	0.15385	0.462	0.462
7	H	3	H	3	1	0.07692	0.231	0.231
					13	1	2.846	2.385

Figure 29

7. Coordinate/Conduct a Passage of Lines (17-3-1014)

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 90.5 a*c	TTCF-f 90.5 b*c
1	H	3	L	1	1	0.04762	0.143	0.048
2	H	3	H	3	2	0.09524	0.286	0.286
3	H	3	M	2	2	0.09524	0.286	0.190
4	H	3	M	2	2	0.09524	0.286	0.190
5	H	3	H	3	2	0.09524	0.286	0.286
6	M	2	H	3	3	0.14286	0.286	0.429
7	M	2	H	3	3	0.14286	0.286	0.429
8	H	3	H	3	2	0.09524	0.286	0.286
9	H	3	H	3	2	0.09524	0.286	0.286
10	H	3	H	3	2	0.09524	0.286	0.286
					21	1	2.714	2.714

8. Conduct Tactical Movement (17-3-1016)

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 100.0 a*c	TTCF-f 89.7 b*c
1	H	3	M	2	1	0.07692	0.231	0.154
2	H	3	M	2	2	0.15385	0.462	0.308
3	H	3	M	2	1	0.07692	0.231	0.154
4	H	3	H	3	3	0.23077	0.692	0.692
5	H	3	H	3	3	0.23077	0.692	0.692
6	H	3	H	3	3	0.23077	0.692	0.692
					13	1	3.000	2.692

9. Conduct a Tactical Road March (17-3-0212)

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 90.9 a*c	TTCF-f 87.9 b*c
1	H	3	H	3	2	0.18182	0.545	0.545
2	H	3	H	3	3	0.27273	0.818	0.818
3	M	2	M	2	2	0.18182	0.364	0.364
4	H	3	M	2	1	0.09091	0.273	0.182
5	M	2	M	2	1	0.09091	0.182	0.182
6	H	3	H	3	2	0.18182	0.545	0.545
					11	1	2.727	2.636

10. Execute Actions on Contact (17-3-0221)

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 100.0 a*c	TTCF-f 96.1 b*c
1	H	3	H	3	2	0.11765	0.353	0.353
2	H	3	H	3	3	0.17647	0.529	0.529
3	H	3	M	2	2	0.11765	0.353	0.235
4	H	3	H	3	1	0.05882	0.176	0.176
5	H	3	H	3	2	0.11765	0.353	0.353
6	H	3	H	3	1	0.05882	0.176	0.176
7	H	3	H	3	3	0.17647	0.529	0.529
8	H	3	H	3	2	0.11765	0.353	0.353
9	H	3	H	3	1	0.05882	0.176	0.176
					17	1	3.000	2.882

11. Destroy an Inferior Force (17-3-2450)

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 100.0 a*c	TTCF-f 100.0 b*c
1	H	3	H	3	1	0.063	0.188	0.188
2	H	3	H	3	2	0.125	0.375	0.375
3	H	3	H	3	3	0.188	0.563	0.563
4	H	3	H	3	3	0.188	0.563	0.563
5	H	3	H	3	3	0.188	0.563	0.563
6	H	3	H	3	3	0.188	0.563	0.563
7	H	3	H	3	1	0.063	0.188	0.188
					16	1	3.000	3.000

12. Assault an Enemy Position (17-3-0220)

CORE

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 97.8 a*c	TTCF-f 95.6 b*c
1	H	3	L	1	0	0.000	0.000	0.000
2	H	3	H	3	1	0.067	0.200	0.200
3	H	3	H	3	1	0.067	0.200	0.200
4	H	3	H	3	2	0.133	0.400	0.400
5	H	3	H	3	1	0.067	0.200	0.200
6	H	3	H	3	1	0.067	0.200	0.200
7	H	3	H	3	3	0.200	0.600	0.600
8	H	3	H	3	3	0.200	0.600	0.600
9	H	3	M	2	2	0.133	0.400	0.267
10	M	2	H	3	1	0.067	0.133	0.200
					15	1	2.933	2.867

Figure 30

13. Conduct an Attack by Fire (17-3-0219)

CORE

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 100.0 a*c	TTCF-f 100.0 b*c
1	H	3	L	1	0	0.000	0.000	0.000
2	H	3	H	3	3	0.250	0.750	0.750
3	H	3	H	3	3	0.250	0.750	0.750
4	H	3	H	3	3	0.250	0.750	0.750
5	H	3	H	3	3	0.250	0.750	0.750
					12	1	3.000	3.000

14. Conduct Overwatch/Support by Fire (17-3-3061)

CORE

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 100.0 a*c	TTCF-f 91.7 b*c
1	H	3	L	1	1	0.125	0.375	0.125
2	H	3	H	3	2	0.250	0.750	0.750
3	H	3	H	3	1	0.125	0.375	0.375
4	H	3	H	3	3	0.375	1.125	1.125
5	H	3	H	3	1	0.125	0.375	0.375
					8	1	3.000	2.750

15. Conduct Reconnaissance by Fire (17-3-0218)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 100.0 a*c	TTCF-f 100.0 b*c
1	H	3	H	3	2	0.200	0.600	0.600
2	H	3	H	3	3	0.300	0.900	0.900
3	H	3	H	3	3	0.300	0.900	0.900
4	H	3	H	3	2	0.200	0.600	0.600
					10	1	3.000	3.000

16. Follow and Support (17-3-2269)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 81.3 a*c	TTCF-f 81.3 b*c
1	H	3	H	3	2	0.125	0.375	0.375
2	L	1	M	2	3	0.1875	0.188	0.375
3	H	3	L	1	2	0.125	0.375	0.125
4	H	3	M	2	2	0.125	0.375	0.250
5	M	2	H	3	3	0.1875	0.375	0.563
6	H	3	H	3	3	0.1875	0.563	0.563
7	H	3	H	3	1	0.0625	0.188	0.188
					16	1	2.438	2.438

17. Coord/Assist Passage of Lines (17-3-0214)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 85.7 a*c	TTCF-f 73.8 b*c
1	H	3	L	1	1	0.071	0.214	0.071
2	H	3	H	3	3	0.214	0.643	0.643
3	H	3	M	2	2	0.143	0.429	0.286
4	H	3	L	1	2	0.143	0.429	0.143
5	M	2	M	2	1	0.071	0.143	0.143
6	M	2	H	3	1	0.071	0.143	0.214
7	M	2	M	2	2	0.143	0.286	0.286
8	M	2	H	3	2	0.143	0.286	0.429
					14	1	2.571	2.214

18. Disengage from the Enemy (17-3-2380)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 81.5 a*c	TTCF-f 100.0 b*c
1	H	3	H	3	2	0.22222	0.667	0.667
2	M	2	H	3	2	0.22222	0.444	0.667
3	M	2	H	3	3	0.33333	0.667	1.000
4	H	3	H	3	2	0.22222	0.667	0.667
					9	1	2.444	3.000

Figure 31

19.Conduct Deliberate Occupation of BP (17-3-2602)

TTCF-e	TTCF-f
87.7	59.6

T S	Capability	a	Feedback	b	Weight	c	a*c	b*c
1	H	3	H	3	1	0.053	0.158	0.158
2	H	3	H	3	1	0.053	0.158	0.158
3	H	3	H	3	2	0.105	0.316	0.316
4	H	3	L	1	0	0.000	0.000	0.000
5	M	2	H	3	1	0.053	0.105	0.158
6	M	2	L	1	2	0.105	0.211	0.105
7	H	3	L	1	0	0.000	0.000	0.000
8	H	3	L	1	2	0.105	0.316	0.105
9	H	3	M	2	3	0.158	0.474	0.316
10	H	3	L	1	2	0.105	0.316	0.105
11	H	3	L	1	1	0.053	0.158	0.053
12	H	3	M	2	1	0.053	0.158	0.105
13	N	0	L	1	1	0.053	0.000	0.053
14	H	3	L	1	1	0.053	0.158	0.053
15	M	2	M	2	1	0.053	0.105	0.105
					19	1	2.632	1.789

20. Conduct Hasty Occupation of BP (17-3-2601)

TTCF-e	TTCF-f
100.0	100.0

T S	Capability	a	Feedback	b	Weight	c	a*c	b*c
1	H	3	H	3	1	0.125	0.375	0.375
2	H	3	H	3	3	0.375	1.125	1.125
3	H	3	H	3	2	0.250	0.750	0.750
4	H	3	H	3	2	0.250	0.750	0.750
5	L	1	M	2	0	0.000	0.000	0.000
					8	1	3.000	3.000

21. Conduct a Perimeter Defense (17-3-2632)

TTCF-e	TTCF-f
100.0	77.8

T S	Capability	a	Feedback	b	Weight	c	a*c	b*c
1	H	3	H	3	2	0.222	0.667	0.667
2	H	3	H	3	2	0.222	0.667	0.667
3	H	3	L	1	1	0.111	0.333	0.111
4	H	3	L	1	1	0.111	0.333	0.111
5	N	0	N	0	0	0.000	0.000	0.000
6	H	3	L	1	1	0.111	0.333	0.111
7	H	3	H	3	2	0.222	0.667	0.667
					9	1	3.000	2.333

22. Conduct a Platoon Defense (17-3-2605)

CORE

TTCF-e	TTCF-f
86.3	80.4

T S	Capability	a	Feedback	b	Weight	c	a*c	b*c
1	H	3	H	3	1	0.059	0.176	0.176
2	H	3	N	0	0	0.000	0.000	0.000
3	H	3	H	3	1	0.059	0.176	0.176
4	H	3	H	3	1	0.059	0.176	0.176
5	L	1	H	3	3	0.176	0.176	0.529
6	H	3	N	0	2	0.118	0.353	0.000
7	H	3	N	0	1	0.059	0.176	0.000
8	H	3	H	3	3	0.176	0.529	0.529
9	H	3	H	3	1	0.059	0.176	0.176
10	H	3	H	3	3	0.176	0.529	0.529
11	M	2	M	2	1	0.059	0.118	0.118
					17	1	2.588	2.412

23. Conduct a Relief in Place (17-3-1025)

TTCF-e	TTCF-f
94.9	48.7

T S	Capability	a	Feedback	b	Weight	c	a*c	b*c
1	H	3	L	1	2	0.154	0.462	0.154
2	H	3	L	1	3	0.231	0.692	0.231
3	M	2	M	2	1	0.077	0.154	0.154
4	M	2	L	1	1	0.077	0.154	0.077
5	H	3	L	1	2	0.154	0.462	0.154
6	H	3	M	2	3	0.231	0.692	0.462
7	H	3	H	3	1	0.077	0.231	0.231
					13	1	2.846	1.462

24. Displace to Successive/Alt BP (17-3-2625)

TTCF-e	TTCF-f
91.7	100.0

T S	Capability	a	Feedback	b	Weight	c	a*c	b*c
1	H	3	H	3	2	0.25	0.750	0.750
2	H	3	H	3	2	0.25	0.750	0.750
3	H	3	H	3	2	0.25	0.750	0.750
4	M	2	H	3	2	0.25	0.500	0.750
					8	1	2.750	3.000

Figure 32

25. Conduct Breach Force Operations (17-3-3070)

CORE **NOT SUPPORTED**

T S	Capability a		Feedback b		Weight c		TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	2	0.15385	0.000	0.000
2	N	0	N	0	2	0.15385	0.000	0.000
3	N	0	N	0	3	0.23077	0.000	0.000
4	N	0	N	0	3	0.23077	0.000	0.000
5	N	0	N	0	1	0.07692	0.000	0.000
6	N	0	N	0	2	0.15385	0.000	0.000
					13	1	0.000	0.000

26. Conduct Operational Decontamination (3-3-C016)

NOT SUPPORTED

T S	Capability a		Feedback b		Weight c		TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	0	0.000	0.000	0.000
2	N	0	N	0	0	0.000	0.000	0.000
3	N	0	N	0	0	0.000	0.000	0.000
4	N	0	N	0	0	0.000	0.000	0.000
5	N	0	N	0	0	0.000	0.000	0.000
6	N	0	N	0	0	0.000	0.000	0.000
					0	0	0.000	0.000

27. Cross an NBC Contaminated Area (17-3-8143)

NOT SUPPORTED

T S	Capability a		Feedback b		Weight c		TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	0	0.000	0.000	0.000
2	N	0	N	0	0	0.000	0.000	0.000
3	N	0	N	0	0	0.000	0.000	0.000
4	N	0	N	0	0	0.000	0.000	0.000
					0	0	0.000	0.000

28. Emplace and Retrieve a Hasty Obstacle (17-3-1026)

NOT SUPPORTED

T S	Capability a		Feedback b		Weight c		TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	0	0.000	0.000	0.000
2	N	0	N	0	1	0.077	0.000	0.000
3	N	0	N	0	1	0.077	0.000	0.000
4	N	0	N	0	2	0.154	0.000	0.000
5	N	0	N	0	1	0.077	0.000	0.000
6	N	0	N	0	1	0.077	0.000	0.000
7	N	0	N	0	0	0.000	0.000	0.000
8	N	0	N	0	0	0.000	0.000	0.000
9	N	0	N	0	1	0.077	0.000	0.000
10	N	0	N	0	3	0.231	0.000	0.000
11	N	0	N	0	1	0.077	0.000	0.000
12	N	0	N	0	0	0.000	0.000	0.000
13	N	0	N	0	2	0.154	0.000	0.000
					13	1	0.000	0.000

29. Conduct Passive Air Defense Measures (44-3-C001)

T S	Capability a		Feedback b		Weight c		TTCF-e 66.7 a*c	TTCF-f 66.7 b*c
1	N	0	N	0	1	0.200	0.000	0.000
2	H	3	H	3	2	0.400	1.200	1.200
3	M	2	M	2	2	0.400	0.800	0.800
					5	1.000	2.000	2.000

30. Conduct Consolidation & Reorg Activities (12-3-C021)

T S	Capability a		Feedback b		Weight c		TTCF-e 33.3 a*c	TTCF-f 33.3 b*c
1	M	2	M	2	2	0.500	1.000	1.000
2	N	0	N	0	2	0.500	0.000	0.000
					4	1	1.000	1.000

Figure 33

31. Conduct Resupply Operations (17-3-0601)

T S	Capability a		Feedback b		Weight c		TTCF-e 100.0 a*c	TTCF-f 73.3 b*c
1	H	3	M	2	1	0.100	0.300	0.200
2	H	3	L	1	2	0.200	0.600	0.200
3	H	3	M	2	2	0.200	0.600	0.400
4	H	3	H	3	2	0.200	0.600	0.600
5	H	3	M	2	1	0.100	0.300	0.200
6	H	3	H	3	1	0.100	0.300	0.300
7	H	3	H	3	1	0.100	0.300	0.300
					10	1	3.000	2.200

32. Change Formation Drill (BD-1)

T S	Capability a		Feedback b		Weight c		TTCF-e 100.0 a*c	TTCF-f 79.2 b*c
1	H	3	M	2	2	0.250	0.750	0.500
2	H	3	M	2	3	0.375	1.125	0.750
3	H	3	H	3	3	0.375	1.125	1.125
					8	1	3.000	2.375

33. Contact Drill (BD-2)

T S	Capability a		Feedback b		Weight c		TTCF-e 75.0 a*c	TTCF-f 69.4 b*c
1	H	3	M	2	2	0.16667	0.500	0.333
2	N	0	N	0	3	0.25	0.000	0.000
3	H	3	H	3	2	0.16667	0.500	0.500
4	H	3	H	3	3	0.25	0.750	0.750
5	H	3	H	3	2	0.16667	0.500	0.500
					12	1	2.250	2.083

34. Action Drill (BD-3)

T S	Capability a		Feedback b		Weight c		TTCF-e 93.3 a*c	TTCF-f 90.0 b*c
1	H	3	M	2	1	0.100	0.300	0.200
2	M	2	M	2	2	0.200	0.400	0.400
3	H	3	H	3	3	0.300	0.900	0.900
4	H	3	H	3	3	0.300	0.900	0.900
5	H	3	H	3	1	0.100	0.300	0.300
					10	1	2.800	2.700

35. React to Indirect Fire Drill (BD-4)

T S	Capability a		Feedback b		Weight c		TTCF-e 72.2 a*c	TTCF-f 72.2 b*c
1	M	2	M	2	1	0.167	0.333	0.333
2	M	2	M	2	1	0.167	0.333	0.333
3	H	3	H	3	1	0.167	0.500	0.500
4	N	0	N	0	1	0.167	0.000	0.000
5	H	3	H	3	2	0.333	1.000	1.000
					6	1.000	2.167	2.167

36. React to Air Attack Drill (BD-5)

T S	Capability a		Feedback b		Weight c		TTCF-e 100.0 a*c	TTCF-f 100.0 b*c
1	H	3	H	3	3	0.300	0.900	0.900
2	H	3	H	3	2	0.200	0.600	0.600
3	H	3	H	3	2	0.200	0.600	0.600
4	H	3	H	3	2	0.200	0.600	0.600
5	H	3	H	3	1	0.100	0.300	0.300
					10	1	3.000	3.000

37. React to Nuclear Attack Drill (BD-6)

NOT SUPPORTED

T S	Capability a		Feedback b		Weight c		TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	0	0.000	0.000	0.000
2	N	0	N	0	0	0.000	0.000	0.000
3	N	0	N	0	0	0.000	0.000	0.000
4	N	0	N	0	0	0.000	0.000	0.000
					0	0	0.000	0.000

38. React to a Chemical/Biological Attack Drill (BD-7)

NOT SUPPORTED

T S	Capability a		Feedback b		Weight c		TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	0	0.000	0.000	0.000
2	N	0	N	0	0	0.000	0.000	0.000
3	N	0	N	0	0	0.000	0.000	0.000
4	N	0	N	0	0	0.000	0.000	0.000
5	N	0	N	0	0	0.000	0.000	0.000
					0	0	0.000	0.000

Figure 34

ARTEP 17-57-10 MTP, Scout Platoon (1996/07/01)

1. Conduct Troop-Leading Procedures (17-3-0065)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 90.0 a*c	TTCF-f 43.3 b*c
1	H	3	L	1	2	0.1000	0.300	0.100
2	H	3	L	1	2	0.1000	0.300	0.100
3	H	3	L	1	2	0.1000	0.300	0.100
4	H	3	M	2	3	0.1500	0.450	0.300
5	H	3	M	2	3	0.1500	0.450	0.300
6	H	3	L	1	2	0.1000	0.300	0.100
7	H	3	L	1	3	0.1500	0.450	0.150
8	L	1	L	1	3	0.1500	0.150	0.150
					20	1.0000	2.700	1.300

2. Conduct Assembly Area Activities (17-3-2000)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 75.6 a*c	TTCF-f 64.4 b*c
1	H	3	L	1	1	0.0667	0.200	0.067
2	M	2	L	1	1	0.0667	0.133	0.067
3	M	2	H	3	3	0.2000	0.400	0.600
4	M	2	H	3	3	0.2000	0.400	0.600
5	M	2	L	1	1	0.0667	0.133	0.067
6	M	2	M	2	1	0.0667	0.133	0.133
7	H	3	L	1	2	0.1333	0.400	0.133
8	M	2	L	1	1	0.0667	0.133	0.067
9	N	0	N	0	0	0.0000	0.000	0.000
10	H	3	L	1	1	0.0667	0.200	0.067
11	M	2	M	2	1	0.0667	0.133	0.133
					15	1.0000	2.267	1.933

3. Conduct Linkup (17-3-2760)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 93.3 a*c	TTCF-f 68.9 b*c
1	H	3	L	1	2	0.1333	0.400	0.133
2	M	2	M	2	3	0.2000	0.400	0.400
3	H	3	H	3	3	0.2000	0.600	0.600
4	H	3	L	1	3	0.2000	0.600	0.200
5	H	3	M	2	1	0.0667	0.200	0.133
6	H	3	H	3	3	0.2000	0.600	0.600
					15	1.0000	2.800	2.067

4. Establish an Observation Post (17-3-1039)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 80.8 a*c	TTCF-f 52.6 b*c
1	H	3	L	1	2	0.0769	0.231	0.077
2	H	3	M	2	3	0.1154	0.346	0.231
3	H	3	L	1	3	0.1154	0.346	0.115
4	H	3	L	1	3	0.1154	0.346	0.115
5	M	2	H	3	3	0.1154	0.231	0.346
6	N	0	N	0	3	0.1154	0.000	0.000
7	M	2	L	1	3	0.1154	0.231	0.115
8	H	3	H	3	3	0.1154	0.346	0.346
9	H	3	M	2	3	0.1154	0.346	0.231
					26	1.0000	2.423	1.577

5. Conduct a Tactical Road March (17-3-1012)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 83.3 a*c	TTCF-f 83.3 b*c
1	H	3	H	3	3	0.1667	0.500	0.500
2	H	3	H	3	3	0.1667	0.500	0.500
3	M	2	M	2	3	0.1667	0.333	0.333
4	H	3	M	2	3	0.1667	0.500	0.333
5	M	2	M	2	3	0.1667	0.333	0.333
6	M	2	H	3	3	0.1667	0.333	0.500
					18	1.0000	2.500	2.500

6. Conduct Tactical Movement (17-3-1016)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 94.1 a*c	TTCF-f 80.4 b*c
1	H	3	L	1	2	0.1176	0.353	0.118
2	H	3	L	1	3	0.1765	0.529	0.176
3	M	2	H	3	3	0.1765	0.353	0.529
4	H	3	H	3	3	0.1765	0.529	0.529
5	H	3	H	3	3	0.1765	0.529	0.529
6	H	3	H	3	3	0.1765	0.529	0.529
					17	1.0000	2.824	2.412

Figure 35

7. Coord/Conduct Passage of Lines Fwd/Rwd(17-3-1014)

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 92.6 a*c	TTCF-f 88.9 b*c
1	H	3	L	1	2	0.0741	0.222	0.074
2	H	3	H	3	2	0.0741	0.222	0.222
3	H	3	M	2	2	0.0741	0.222	0.148
4	H	3	H	3	3	0.1111	0.333	0.333
5	H	3	H	3	3	0.1111	0.333	0.333
6	M	2	H	3	3	0.1111	0.222	0.333
7	M	2	M	2	3	0.1111	0.222	0.222
8	H	3	H	3	3	0.1111	0.333	0.333
9	H	3	H	3	3	0.1111	0.333	0.333
10	H	3	H	3	3	0.1111	0.333	0.333
					27	1.0000	2.778	2.667

8. Coord/Assist Passage of Lines Fwd/Rwd(17-3-1015)

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 80.7 a*c	TTCF-f 73.7 b*c
1	H	3	L	1	2	0.1053	0.316	0.105
2	H	3	H	3	2	0.1053	0.316	0.316
3	H	3	M	2	2	0.1053	0.316	0.211
4	H	3	L	1	2	0.1053	0.316	0.105
5	M	2	M	2	3	0.1579	0.316	0.316
6	M	2	H	3	3	0.1579	0.316	0.474
7	M	2	M	2	2	0.1053	0.211	0.211
8	M	2	H	3	3	0.1579	0.316	0.474
					19	1.0000	2.421	2.211

9. Execute Actions on Contact (17-3-1021)

CORE

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 100.0 a*c	TTCF-f 95.8 b*c
1	H	3	H	3	3	0.1250	0.375	0.375
2	H	3	H	3	3	0.1250	0.375	0.375
3	H	3	M	2	3	0.1250	0.375	0.250
4	H	3	H	3	3	0.1250	0.375	0.375
5	H	3	H	3	3	0.1250	0.375	0.375
6	H	3	H	3	3	0.1250	0.375	0.375
7	H	3	H	3	3	0.1250	0.375	0.375
8	H	3	H	3	3	0.1250	0.375	0.375
					24	1.0000	3.000	2.875

10. Conduct Over watch / Support By Fire (17-3-3061)

CORE

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 100.0 a*c	TTCF-f 74.1 b*c
1	H	3	L	1	2	0.2222	0.667	0.222
2	H	3	H	3	2	0.2222	0.667	0.667
3	H	3	M	2	2	0.2222	0.667	0.444
4	H	3	H	3	2	0.2222	0.667	0.667
5	H	3	M	2	1	0.1111	0.333	0.222
					9	1.0000	3.000	2.222

11. Conduct a Dismounted Patrol at Team Level (17-3-4130)

UNRATED

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 88.9 a*c	TTCF-f 44.4 b*c
1	M	2	L	1	1	0.3333	0.667	0.333
2	H	3	M	2	1	0.3333	1.000	0.667
3	H	3	L	1	1	0.3333	1.000	0.333
					3	1.0000	2.667	1.333

12. Conduct an NBC Reconnaissance (17-3-4040)

NOT SUPPORTED

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	0	0.0000	0.000	0.000
2	N	0	N	0	0	0.0000	0.000	0.000
3	N	0	N	0	0	0.0000	0.000	0.000
4	N	0	N	0	0	0.0000	0.000	0.000
					0	0.0000	0.000	0.000

Figure 36

13. Conduct a Route Reconnaissance (17-3-1017)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 87.2 a*c	TTCF-f 76.9 b*c
1	H	3	L	1	2	0.1538	0.462	0.154
2	H	3	H	3	3	0.2308	0.692	0.692
3	M	2	M	2	3	0.2308	0.462	0.462
7	H	3	H	3	3	0.2308	0.692	0.692
8	M	2	M	2	2	0.1538	0.308	0.308
					13	1.0000	2.615	2.308

14. Conduct Area / Zone Reconnaissance (17-3-4010)

CORE

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 76.9 a*c	TTCF-f 64.1 b*c
1	H	3	L	1	1	0.0769	0.231	0.077
2	H	3	M	2	3	0.2308	0.692	0.462
3	M	2	M	2	3	0.2308	0.462	0.462
4	H	3	H	3	3	0.2308	0.692	0.692
5	L	1	L	1	3	0.2308	0.231	0.231
					13	1.0000	2.308	1.923

15. Conduct Bypass Operations (17-3-2420)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 100.0 a*c	TTCF-f 100.0 b*c
1	H	3	H	3	2	0.2857	0.857	0.857
2	H	3	H	3	3	0.4286	1.286	1.286
3	H	3	H	3	2	0.2857	0.857	0.857
					7	1.0000	3.000	3.000

16. Conduct Reconnaissance by Fire (17-3-0218)

CORE

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 100.0 a*c	TTCF-f 81.8 b*c
1	H	3	L	1	3	0.2727	0.818	0.273
2	H	3	H	3	2	0.1818	0.545	0.545
3	H	3	H	3	3	0.2727	0.818	0.818
4	H	3	H	3	3	0.2727	0.818	0.818
					11	1.0000	3.000	2.455

17. Destroy an Inferior Force (17-3 2450)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 100.0 a*c	TTCF-f 100.0 b*c
1	H	3	H	3	2	0.1429	0.429	0.429
2	H	3	H	3	3	0.2143	0.643	0.643
3	H	3	H	3	3	0.2143	0.643	0.643
4	H	3	H	3	3	0.2143	0.643	0.643
5	H	3	H	3	3	0.2143	0.643	0.643
					14	1.0000	3.000	3.000

18. Conduct A Screen (17-3-1023)

CORE

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 87.0 a*c	TTCF-f 79.6 b*c
1	H	3	L	1	2	0.1111	0.333	0.111
2	L	1	L	1	2	0.1111	0.111	0.111
3	H	3	H	3	3	0.1667	0.500	0.500
4	M	2	M	2	3	0.1667	0.333	0.333
5	H	3	H	3	3	0.1667	0.500	0.500
6	H	3	H	3	3	0.1667	0.500	0.500
7	H	3	H	3	2	0.1111	0.333	0.333
					18	1.0000	2.611	2.389

Figure 37

19. Conduct Hasty Occupation of a Plt BP (17-3-2601)

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 94.9 a*c	TTCF-f 94.9 b*c
1	H	3	H	3	3	0.2308	0.692	0.692
2	H	3	H	3	2	0.1538	0.462	0.462
3	H	3	H	3	3	0.2308	0.692	0.692
4	H	3	H	3	3	0.2308	0.692	0.692
5	M	2	M	2	2	0.1538	0.308	0.308
					13	1.0000	2.846	2.846

20. Conduct Deliberate Occupation of a Plt BP (17-3-2602)

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 87.6 a*c	TTCF-f 56.2 b*c
1	H	3	H	3	3	0.0857	0.257	0.257
2	H	3	H	3	3	0.0857	0.257	0.257
3	H	3	L	1	2	0.0571	0.171	0.057
4	H	3	L	1	2	0.0571	0.171	0.057
5	M	2	H	3	2	0.0571	0.114	0.171
6	M	2	L	1	2	0.0571	0.114	0.057
7	H	3	L	1	2	0.0571	0.171	0.057
8	H	3	L	1	2	0.0571	0.171	0.057
9	H	3	M	2	3	0.0857	0.257	0.171
10	H	3	L	1	3	0.0857	0.257	0.086
11	H	3	L	1	2	0.0571	0.171	0.057
12	H	3	M	2	2	0.0571	0.171	0.114
13	N	0	L	1	2	0.0571	0.000	0.057
14	H	3	L	1	2	0.0571	0.171	0.057
15	M	2	M	2	3	0.0857	0.171	0.171
					35	1.0000	2.629	1.686

21. Prepare a Plt Fire Plan (17-3-0104)

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 75.0 a*c	TTCF-f 33.3 b*c
1	L	1	L	1	3	0.2500	0.250	0.250
2	M	2	L	1	3	0.2500	0.500	0.250
3	H	3	L	1	3	0.2500	0.750	0.250
4	H	3	L	1	3	0.2500	0.750	0.250
					12	1.0000	2.250	1.000

22. Conduct A Platoon Defense(17-3-2605)

CORE

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 98.8 a*c	TTCF-f 86.4 b*c
1	H	3	H	3	3	0.1111	0.333	0.333
2	H	3	L	1	2	0.0741	0.222	0.074
3	H	3	H	3	2	0.0741	0.222	0.222
4	H	3	H	3	2	0.0741	0.222	0.222
5	H	3	H	3	3	0.1111	0.333	0.333
6	H	3	H	3	3	0.1111	0.333	0.333
7	H	3	L	1	3	0.1111	0.333	0.111
8	H	3	H	3	3	0.1111	0.333	0.333
9	H	3	H	3	2	0.0741	0.222	0.222
10	H	3	H	3	3	0.1111	0.333	0.333
11	M	2	M	2	1	0.0370	0.074	0.074
					27	1.0000	2.963	2.593

23. Displace to Screen Line or Plt BP (17-3-2627)

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 91.7 a*c	TTCF-f 100.0 b*c
1	H	3	H	3	3	0.2500	0.750	0.750
2	H	3	H	3	3	0.2500	0.750	0.750
3	H	3	H	3	3	0.2500	0.750	0.750
4	M	2	H	3	3	0.2500	0.500	0.750
					12	1.0000	2.750	3.000

24. Conduct a Relief in Place (17-3-1025)

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 85.2 a*c	TTCF-f 55.6 b*c
1	H	3	L	1	2	0.1111	0.333	0.111
2	H	3	L	1	3	0.1667	0.500	0.167
3	M	2	M	2	3	0.1667	0.333	0.333
4	M	2	L	1	2	0.1111	0.222	0.111
5	H	3	L	1	2	0.1111	0.333	0.111
6	M	2	M	2	3	0.1667	0.333	0.333
7	H	3	H	3	3	0.1667	0.500	0.500
					18	1.0000	2.556	1.667

Figure 38

25. Conduct Convoy Escort (17-3-2320)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 94.7 a*c	TTCF-f 84.2 b*c
1	H	3	L	1	1	0.0526	0.158	0.053
2	H	3	L	1	2	0.1053	0.316	0.105
3	M	2	M	2	3	0.1579	0.316	0.316
4	H	3	H	3	3	0.1579	0.474	0.474
5	H	3	H	3	3	0.1579	0.474	0.474
6	H	3	H	3	1	0.0526	0.158	0.158
7	H	3	H	3	3	0.1579	0.474	0.474
8	H	3	H	3	2	0.1053	0.316	0.316
9	H	3	H	3	1	0.0526	0.158	0.158
					19	1.0000	2.842	2.526

26. Conduct Roadblock/Checkpoint Opns (17-3-2324)

NOT SUPPORTED

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	0	0.0000	0.000	0.000
2	N	0	N	0	0	0.0000	0.000	0.000
3	N	0	N	0	0	0.0000	0.000	0.000
4	N	0	N	0	0	0.0000	0.000	0.000
5	N	0	N	0	0	0.0000	0.000	0.000
6	N	0	N	0	0	0.0000	0.000	0.000
7	N	0	N	0	0	0.0000	0.000	0.000
8	N	0	N	0	0	0.0000	0.000	0.000
9	N	0	N	0	0	0.0000	0.000	0.000
10	N	0	N	0	0	0.0000	0.000	0.000
					0	0.0000	0.000	0.000

27. Reconnoiter an Obstacle/Restriction (17-3-1020)

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 86.1 a*c	TTCF-f 63.9 b*c
1	H	3	H	3	2	0.1667	0.500	0.500
2	H	3	H	3	2	0.1667	0.500	0.500
3	M	2	L	1	2	0.1667	0.333	0.167
4	M	2	N	0	3	0.2500	0.500	0.000
5	H	3	H	3	3	0.2500	0.750	0.750
					12	1.0000	2.583	1.917

28. Conduct Operational Decontamination (3-3-C016)

NOT SUPPORTED

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	0	0.0000	0.000	0.000
2	N	0	N	0	0	0.0000	0.000	0.000
3	N	0	N	0	0	0.0000	0.000	0.000
7	N	0	N	0	0	0.0000	0.000	0.000
8	N	0	N	0	0	0.0000	0.000	0.000
9	N	0	N	0	0	0.0000	0.000	0.000
					0	0.0000	0.000	0.000

29. Cross an NBC Contaminated Area (17-3-8143)

NOT SUPPORTED

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1	N	0	N	0	0	0.0000	0.000	0.000
2	N	0	N	0	0	0.0000	0.000	0.000
3	N	0	N	0	0	0.0000	0.000	0.000
4	N	0	N	0	0	0.0000	0.000	0.000
					0	0.0000	0.000	0.000

30. Emplace and Retrieve a Hasty Obstacle (17-3-1026)

UNRATED

TS	Capability	a	Feedback	b	Weight	c	TTCF-e 0.0 a*c	TTCF-f 0.0 b*c
1		-		-	2	0.1429		
2		-		-	1	0.0714		
3		-		-	1	0.0714		
4		-		-	1	0.0714		
5		-		-	1	0.0714		
6		-		-	1	0.0714		
7		-		-	1	0.0714		
8		-		-	1	0.0714		
9		-		-	1	0.0714		
10		-		-	1	0.0714		
11		-		-	1	0.0714		
12		-		-	1	0.0714		
13		-		-	1	0.0714		
					14	1.0000	0.000	0.000

NEED DIM CAPABILITY

Figure 39

31. Conduct Demolition Guard Force Opns (17-3-1027)

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 84.6 a*c	TTCF-f 46.2 b*c
1	M	2	M	2	3	0.2308	0.462	0.462
2	H	3	N	0	2	0.1538	0.462	0.000
3	H	3	N	0	1	0.0769	0.231	0.000
4	H	3	L	1	1	0.0769	0.231	0.077
5	H	3	L	1	2	0.1538	0.462	0.154
6	H	3	H	3	3	0.2308	0.692	0.692
7	N	0	N	0	1	0.0769	0.000	0.000
					13	1.0000	2.538	1.385

32. Conduct Passive Air Defense Measures (44-3-C001)

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 62.5 a*c	TTCF-f 62.5 b*c
1	N	0	N	0	2	0.2500	0.000	0.000
2	H	3	H	3	3	0.3750	1.125	1.125
3	M	2	M	2	3	0.3750	0.750	0.750
					8	1.0000	1.875	1.875

33. Conduct Consolidation and Reorg Activities (12-2-C021)

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 66.7 a*c	TTCF-f 66.7 b*c
1	H	3	H	3	2	0.5000	1.500	1.500
2	L	1	L	1	2	0.5000	0.500	0.500
					4	1.0000	2.000	2.000

34. Conduct Resupply Operations (17-3-1030)

T S	Capability	a	Feedback	b	Weight	c	TTCF-e 95.2 a*c	TTCF-f 81.0 b*c
1	M	2	M	2	2	0.1429	0.286	0.286
2	H	3	L	1	1	0.0714	0.214	0.071
3	H	3	M	2	2	0.1429	0.429	0.286
4	H	3	H	3	2	0.1429	0.429	0.429
5	H	3	H	3	2	0.1429	0.429	0.429
6	H	3	M	2	2	0.1429	0.429	0.286
7	H	3	H	3	2	0.1429	0.429	0.429
8	H	3	H	3	1	0.0714	0.214	0.214
					14	1.0000	2.857	2.429

Figure 40

Annex C SEMI-AUTOMATED FORCES COMBAT INSTRUCTION SET ASSESSMENT

FORM 4-12 Ratings of Semi-Automated Forces Implemented in Combat Instruction Sets

A= Acceptable AR= Acceptable with Risk U= Unacceptable ND= No Data

×= Implemented
IDT= Integrated Development Team
TRAC= TRADOC Analysis Center
TSD= Threat Support Division

Common Notes:

1: Refer to open PTR Test Procedure column
2: Tested only by IDT; not tested by independent agency or the STRUCCTT team.
3: Separably executable behavior that may or may not be subsumed within a numbered CIS. Identified by independent SAIC in support of ONESAF functional assessment.
(B): Baseline system requirement.

Table 3

Tank Platoon		Automatic	Operator Implemented	Test Procedure	STRUCCTT	Rating
B0001	Execute Column Formation		×	IDT TRAC (13210)	×	AR[1]
B0002	Execute Staggered Column Formation (B)	×		IDT, TRAC	×	A
B0003	Execute Line Formation (B)	×		IDT, TRAC	×	A
B0004	Execute Wedge Formation (B)	×		IDT, TRAC	×	A
B0005	Execute Echelon Formation		×	IDT	×	A
B0006	Execute Vee Formation (B)	×		IDT TRAC (13212)	×	AR[1]
B0007	Execute a Coil Formation					
B0008	Execute a Herringbone Formation (B)	×		IDT TRAC (13213)		AR[1]
B0009	Action Drill Front (B)	×		IDT, TRAC	×	A
B0010	Action Drill Right (B)	×		IDT, TRAC	×	A
B0011	Action Drill Left (B)	×		IDT, TRAC	×	A
B0012	Action Drill Rear		×	IDT	×	A
B0013	React to Indirect Fires (B)	×		IDT, TRAC	×	A
B0014	Contact Drill (B)	×		IDT, TRAC	×	A

B0015	Execute Traveling (B)	×		IDT, TRAC	×	A
B0016	Execute Bounding Overwatch (B)	×		IDT, TRAC		A
B0017	Execute Traveling Overwatch (B)	×		IDT, TRAC		A
B0018	Perform Assembly Area Activities (B)	×		IDT, TRAC		A
B0019	Take Active Air Defense Measures While Moving (B)	×		IDT		AR[2]
B0020	Take Active AD Measures While Stationary (B)	×		IDT	×	A
B0021	Conduct Tactical Road March (B)	×		IDT, TRAC	×	A
B0022	Execute Actions on Contact (B)	×		IDT	×	A
B0023	Perform Recon by Fire		×	IDT		AR[2]
B0024	Perform an Attack by Fire (B)	×		IDT, TRAC	×	A
B0025	Conduct Hasty Occ of BP (B)	×		IDT, TRAC	×	A
B0026	Occupy Plt BP (B)	×		IDT, TRAC	×	A
B0027	Perform a Passage of Lines (B)	×		IDT		AR[2]
B0028	Assist a Passage of Lines		×	IDT		AR[2]
B0029	Perform Consolidation & Reorganization Act (B)	×		IDT, TRAC		A
B0030	Perform Plt Fire and Movement (B)	×		IDT, TRAC	×	A
B0031	Assault an Enemy Position (B)	×		IDT, TRAC	×	A
B0032	Execute a Plt Defensive Mission (B)	×		IDT TRAC (13578)	×	AR[1]
B0033	React to Enemy Dismounted Attack	×		IDT		AR[2]
B0034	Displace to subsequent BP (B)	×		IDT, TRAC	×	A
B0035	Assist a Relief in Place		×	IDT		AR[2]
B0036	Take Actions at an Obstacle (B)	×		IDT	×	A
B0037	Execute a Prepared Obstacle					

B0038	Construct a Hasty Obstacle					
B0039	Emplace a Hasty Protective Minefield					
B0040	Move in a Built Up Area		×	IDT		AR[2]
B0041	Perform Resupply Opns (B)	×		IDT	×	A
B0042	Perform Maintenance Opns					
B0043	Establish an OP					
B0044	Move Through a Defile		×	IDT		AR[2]
B0045	Conduct Breach Force Operations	×		IDT	×	A
B0046	Conduct Assault Operations	×		IDT	×	A
B0047	Conduct Support Force Operations	×		IDT	×	A
	Suppressive Fire	×		IDT		AR[2]
	Assault Position Activities	×		IDT		AR[2]

Table 4

	Mechanized Infantry Platoon	Automatic	Operator Implemented	Test Procedure	STRUCCTT	Rating
B0101	Execute Column Formation (B)	×		IDT, TRAC	×	A
B0102	Execute Line Formation (B)	×		IDT, TRAC	×	A
B0103	Execute Echelon Formation		×	IDT	×	A
B0104	Execute Wedge Formation (B)	×		IDT, TRAC	×	A
B0105	Execute Herringbone Formation (B)	×		IDT TRAC (13214)		AR[1]
B0106	Execute Coil Formation					
B0107	Move Mounted (B)	×		IDT, TRAC	×	A
B0108	Execute Traveling Overwatch (B)	×		IDT, TRAC	×	A
B0109	Execute Bounding Overwatch (B)	×		IDT, TRAC		A
B0110	Execute Action Right (B)	×		IDT TRAC (15256)	×	AR[1]
B0111	Execute Action Left (B)	×		IDT TRAC (15256)	×	AR[1]
B0112	React to Indirect Fire (B)	×		IDT, TRAC	×	A
B0113	React to Air Attack (B)	×		IDT, TRAC	×	A
B0115	Hasty Dismount (B)	×		IDT	×	A
B0116	Mount Vehicle (B)	×		IDT, TRAC	×	A
B0117	Occupy Assembly Area (B)	×		IDT, TRAC		A
B0118	Conduct Tactical Road March (B)	×		IDT TRAC (15256)	×	AR[1]
B0119	React to Direct Fire/ATGM (B)	×		IDT, TRAC	×	A
B0120	Support by Fire (B)	×		IDT, TRAC	×	A
B0121	Conduct Fire & Movement (B)	×		IDT, TRAC	×	A
B0122	Breach Obstacle (B)	×		IDT		AR[2]
B0123	Assault Mounted (B)	×		IDT, TRAC	×	A
B0124	Knock Out Bunker					
B0125	Consolidate and Reorganization (B)	×		IDT,TRAC		A
B0126	Establish Hasty Position (B)	×		IDT, TRAC	×	A

B0127	Prepare Defensive Positions		×	IDT		AR[2]
B0128	Defend Battle Position (B)	×		IDT, TRAC	×	A
B0129	Disengage (Mounted) (B)	×		IDT, TRAC	×	A
B0130	React to Ambush		×	IDT	×	A
B0131	Conduct Antiarmor Ambush		×	IDT		AR[2]
B0132	Conduct Hasty Ambush		×	IDT		AR[2]
B0133	Conduct Point Ambush		×	IDT		AR[2]
B0134	Cross Defile (B)	×		IDT		AR[2]
B0135	Clear Wood Line (B)	×		IDT		AR[2]
B0136	Move (MOUT)					
B0137	Emplace Hasty Protective Minefield	×		IDT		AR[2]
B0138	Conduct Passage of Lines		×	IDT		AR[2]
B0139	Recon Objective		×	IDT		AR[2]
B0140	Occupy Objective Rally Point		×	IDT		AR[2]
B0141	Establish Patrol Base		×	IDT		AR[2]
B0142	Zone Recon		×	IDT		AR[2]
B0143	Conduct Screen/Guard Operations	×		IDT		AR[2]
B0144	Traveling and Traveling Overwatch (B)	×		IDT, TRAC	×	A
B0145	Cross Danger Area (Dismounted) (B)	×		IDT		AR[2]
B0146	React to Contact (Dismounted) (B)	×		IDT	×	A
B0148	Assault Dismounted (Raid)		×	IDT		AR[2]
B0149	Disengage (Dismounted) (B)	×		IDT		AR[2]
B0150	Conduct Vehicle Operations					
B0152	Sustain (B)	×		IDT		AR[2]
B0154	Bounding Overwatch (B)	×		IDT, TRAC	×	A
B0155	React to Contact (B)	×		IDT	×	A
B0156	Take Actions at Obstacle (B)	×		IDT	×	A
B0157	Conduct Aerial Resupply		×	IDT		AR[2]
	Action at Assault Position	×		IDT	×	A[3]
	Execute Action Drill	×		IDT	×	A[3]
	Dismounted Overwatch	×		IDT		AR[2,3]
	Dismounted Traveling	×		IDT		AR[2,3]
	Suppressive Fire	×		IDT		AR[2,3]

Table 3

Company Team		Automatic	Operator Implemented	Test Procedure	STRUCCTT	Rating
B1101	Perform Tactical Movement (B)	×		IDT, TRAC		A
B1102	Perform Tactical Road March (B)	×		IDT		AR[2]
B1103	Perform Passage of Lines		×	IDT		AR[2]
B1104	Perform Actions on Contact (B)	×		IDT	×	AR[4]
B1105	Assault on Enemy Position (Mounted) (B)	×		IDT	×	A
B1106	Occupy Assembly Area (B)	×		IDT, TRAC		A
B1107	Perform Assault Position Activities	×		IDT		A[2]
B1108	Perform Attack Position Ac tivities (B)	×		IDT	×	A
B1109	Assault an Enemy Position (Dismounted)		×	IDT		AR[2]
B1111	Consolidate on the Objective (B)	×		IDT	×	A
B1112	Reorganize on the Objective (B)	×		IDT	×	A
B1113	Execute Action on Air Attack (B)	×		IDT TRAC (16543)	×	AR[1]
B1114	Change Formation (B)	×		IDT, TRAC	×	A
B1116	Execute Action Left (B)	×		IDT TRAC (16543)	×	AR[1]
B1117	Execute Action Right (B)	×		IDT TRAC (16543)	×	AR[1]
B1119	React to Indirect Fire (B)	×		IDT	×	A
B1121	Defend (B)	×		IDT, TRAC	×	A
B1122	Perform an Attack by Fire		×	IDT	×	A
B1123	Support by Fire	×		IDT		AR[2]
B1124	Breach Obstacle (B)	×		IDT, TRAC		A
B1126	Withdraw Not Under Pressure		×	IDT		AR[2]
B1127	Perform Relief in Place		×	IDT		AR[2]
B1128	Assist Passage of Lines		×	IDT		AR[2]

B1129	Conduct Hasty River/Gap Crossing (B)	×		IDT		AR[2]
B1130	Delay		×	IDT		AR[2]
B1131	Emplace an Obstacle		×	IDT		AR[2]
B1132	React to Reinforced Obstacle	×		IDT		AR[2]
B1134	Perform Reconnaissance		×	IDT		AR[2]
B1135	Occupy Objective Rally Point		×	IDT		AR[2]
B1136	Linkup		×	IDT		AR[2]
B1137	Perform Guard Opns		×	IDT		AR[2]
B1138	Perform Screen Opns		×	IDT		AR[2]
B1139	Perform Raid (Mounted and Dismounted)		×	IDT		AR[2]
B1140	Perform Ambush		×	IDT		AR[2]
B1141	Breakout from encirclement		×	IDT		AR[2]
B1142	Infiltrate/Exfiltrate		×	IDT		AR[2]
B1143	Perform Tailgate Resupply					
B1144	Perform Service Station Resupply (B)	×		IDT	×	A
B1145	Execute Action Front		×	IDT	×	A
B1146	Execute Action Rear		×	IDT	×	A
B1147	Withdraw Under Pressure		×	IDT	×	A
	Bounding Overwatch 1	×		IDT		AR[2,3]
	Bounding Overwatch 2	×		IDT		AR[2,3]
	Bounding Overwatch 3	×		IDT		AR[2,3]
	Traveling	×		IDT		AR[2,3]
	Traveling Overwatch 1	×		IDT		AR[2,3]
	Traveling Overwatch 2	×		IDT		AR[2,3]

4: SAFOR unit implementing actions on contact currently can only execute an offensive reaction (attack by fire, assault, etc.). Does not permit bypass or other offensive actions.

Table 4

	Battalion Scout Platoon	Automatic	Operator Implemented	Test Procedure	STRUCCTT	Rating
B0301	Perform Tactical Road March (B)	×		IDT	×	A
B0302	Occupy an Assembly Area (B)	×		IDT		AR[2]
B0303	Perform Passage of Lines (B)	×		IDT		AR[2]
B0304	Assist a Passage of Lines		×	IDT		AR[2]
B0305	React to Indirect Fires (B)	×		IDT	×	A
B0306	Traveling		×	IDT	×	A
B0307	Traveling Overwatch		×	IDT	×	A
B0308	Bounding Overwatch (B)	×		IDT	×	A
B0309	Perform Route Reconnaissance		×	IDT		AR[2]
B0310	Perform Zone Reconnaissance	×		IDT		AR[2]
B0311	Perform Area Reconnaissance		×	IDT		AR[2]
B0312	Recon an Obstacle and a Bypass		×	IDT		AR[2]
B0313	Execute Actions on Contact (B)	×		IDT	×	A
B0314	Support a Hasty Attack		×	IDT		AR[2]
B0315	Conduct a Screen (B)	×		IDT	×	A
B0316	Conduct a Relief in Place		×	IDT		AR[2]
B0317	Perform Demolition Guard Operations		×	IDT		AR[2]
B0318	Perform Resupply Operations (B)	×		IDT		AR[2]
B0319	Perform Platoon Maintenance Operations					
B0320	Take Active AD Measures Stationary		×	IDT	×	A
B0321	Take Active AD Measures Moving (B)	×		IDT	×	A
B0322	Establish an OP				×	A
	React to Air Attack	×		IDT	×	A

Table 5

	ADA Platoon	Automatic	Operator Implemented	Test Procedure	STRUCCTT	Rating
B0801	Provide Stinger AD		×	IDT	×	A
B0802	Provide Stinger AD for a Convoy while Integrated into March Column		×	IDT		AR[2]
B0803	Provide Stinger AD Prepositioned for Convoy		×	IDT		AR[2]
B0804	Provide Stinger AD for a Static Position		×	IDT	×	A
B0805	Provide Stinger AD while Moving with a Task Force (B)	×		IDT	×	A
B0806	Deploy and Occupy Positions	×		IDT	×	A
	Dismount Vehicle	×		IDT		AR[2,3]
	Mount Vehicle	×		IDT		AR[2,3]
	Occupy a Position	×		IDT		AR[2,3]
B0807	Occupy a Team Firing Position (B)	×		IDT	×	A
B0808	Travel to and Occupy the NDP	×		IDT	×	A
B0809	Select a Firing Team Position		×	IDT		AR[2]
B0810	Take Active AD Measures against Hostile Aircraft		×	IDT	×	A
B0811	React to Smoke Opns					
B0812	Move Tactically		×	IDT	×	A
	Occupy Assembly Area	×		IDT		AR[2,3]
	Execute Traveling	×		IDT	×	A[3]
B0813	Employ Physical Security Measures					

Table 6 (Never built; units eliminated from force structure.)

	Antiarmor Platoon	**Automatic**	**Operator Implemented**	**Test Procedure**	**STRUCCTT**	**Rating**
B0501	Overwatch/Support by Fire					
B0502	Attack/C-Attack by Fire					
B0503	Defend Against Air Attack					
B0504	Perform Vehicle operations					
B0505	Occupy TOW Firing Position					
B0506	Control TOW Fires					
B0507	Move Tactically					
B0508	Break Contact					
B0509	React to Indirect Fire					
B0510	Execute Coil Formation					
B0511	Execute Herringbone Formation					
B0512	React to Direct Fire/ATGM					

Table 7 (Never built; units eliminated from force structure.)

	Antiarmor Company	**Automatic**	**Operator Implemented**	**Test Procedure**	**STRUCCTT**	**Rating**
B1701	Occupy Assembly Area					
B1702	Perform Passage of Lines					
B1703	Screen					
B1704	Consolidation and Reorganization					
B1705	Withdraw Not Under Pressure					
B1706	Provide AA Fire Support to B Opns					
B1707	Employ Air Defense Measures (Active Only)					
B1708	Withdraw Under Pressure					
B1709	Perform Tactical Road March					

Table 8

	Battalion Task Force	Automatic	Operator Implemented	Test Procedure	STRUCCTT	Rating
B2001	Occupy Assembly Area (B)	×		IDT		AR[2]
B2002	Perform Tactical Road March (B)	×		IDT		AR[2]
B2003	Perform Passage of Lines		×	IDT		AR[2]
B2004	Move Tactically (B)	×		IDT		AR[2]
B2005	Perform Hasty River/Gap Crossing		×	IDT		AR[2]
B2006	Fight a Meeting Engagement		×	IDT		AR[2]
B2007	Assault		×	IDT		AR[2]
B2008	Attack/Counterattack by Fire		×	IDT		AR[2]
B2009	Defend		×	IDT		AR[2]
B2010	Cover Passage of Lines		×	IDT		AR[2]
B2011	Withdraw Under Pressure		×	IDT		AR[2]
B2012	Withdraw Not Under Pressure		×	IDT		AR[2]
B2013	Delay		×	IDT		AR[2]
B2014	Perform Relief in Place		×	IDT		AR[2]
B2015	Perform Linkup		×	IDT		AR[2]
B2016	Perform a Raid		×	IDT		AR[2]
B2017	Infiltrate		×	IDT		AR[2]
B2018	Perform Guard		×	IDT		AR[2]
B2019	Bypass Enemy Force		×	IDT		AR[2]
B2020	Consolidate		×	IDT		AR[2]
B2021	Perform Air Assault		×	IDT		AR[2]
B2022	Breakout From Encirclement		×	IDT		AR[2]
B2023	Perform Screen		×	IDT		AR[2]
B2024	Breach Defended Obstacles (B)	×		IDT		AR[2]
B2025	Perform Air Defense Operations		×	IDT		AR[2]

Table 9

	Armored Cavalry Troop	Automatic	Operator Implemented	Test Procedure	STRUCCTT	Rating
B1501	Perform Route Reconnaissance		×	IDT		AR[2]
B1502	Perform Zone Reconnaissance		×	IDT		AR[2]
B1503	Perform Screen Operations	×		IDT		AR[2]
B1504	Perform Movement to Contact		×	IDT		AR[2]
B1505	Perform Actions on contact (B)	×		IDT		AR[2]
B1506	Perform Hasty Attack		×	IDT		AR[2]
B1507	Delay in Troop Sector (B)	×		IDT		AR[2]
B1508	Defend in Troop Sector		×	IDT		AR[2]
B1509	Defend a Battle Position		×	IDT		AR[2]
B1510	Perform Tactical Road March	×		IDT		AR[2]
B1511	Conduct Tactical Movement (B)	×		IDT		AR[2]
B1512	Occupy an Assembly Area (B)	×		IDT		AR[2]
B1513	Perform a Relief in Place		×	IDT		AR[2]
B1514	Perform Passage of Lines (B)	×		IDT		AR[2]
B1515	Assist Passage of Lines		×	IDT		AR[2]
B1516	Perform Hasty Water Crossing Operations		×	IDT		AR[2]
B1517	Perform Hasty Obstacle Breaching	×		IDT		AR[2]
B1518	Take Active Air Defense Measures Against Hostile Aircraft (B)	×		IDT		AR[2]
B1519	Organize Troop CSS					
B1520	Perform Resupply Operations (B)	×		IDT		AR[2]
B1521	Operate Troop CP					
B1522	React to Indirect Fire	×		IDT		AR[2]
B1523	Consolidate on the Objective		×	IDT		AR[2]
B1524	Reorganize on the Objective		×	IDT		AR[2]

B1525	Conduct Bounding Overwatch	×		IDT		AR[2]
B1526	Perform a Zone Reconnaissance	×		IDT		AR[2]
B1527	Conduct a Screen	×		IDT		AR[2]
B1528	Execute Actions on Contact		×	IDT		AR[2]

Table 10

	Air Cavalry/Recon Troop	Automatic	Operator Implemented	Test Procedure	STRUCCTT	Rating
B1301	Engage Targets (B)	×		IDT		AR[2]
B1302	Conduct JAAT Operations					
B1303	Use Countermeasures Against Enemy ADA to Ensure Aircraft Surv					
B1304	Take Active air Defense Measures Against Hostile Aircraft					
B1305	Return to Assembly Area, Prep for Future Operations					
B1306	Report Intelligence Data		×	IDT		AR[2]
B1307	Conduct Area Recon (B)	×		IDT		AR[2]
B1308	Conduct Zone Recon		×	IDT		AR[2]
B1309	Conduct Route Recon		×	IDT		AR[2]
B1310	Perform Action on Contact (B)	×		IDT		AR[2]
B1311	Egress to Assembly Area					
B1312	Conduct Screening Opns		×	IDT		AR[2]
B1313	Conduct Hasty Attack		×	IDT		AR[2]
B1314	React to Indirect Fire					
	Execute Traveling	×		IDT		AR[2]

Table 11

	Armored Cavalry Squadron	Automatic	Operator Implemented	Test Procedure	STRUCCTT	Rating
B2201	Occupy Squadron AA (B)	×		IDT		AR[2]
B2202	Conduct Road March (B)	×		IDT		AR[2]
B2203	Conduct Stationary Guard		×	IDT		AR[2]
B2204	Conduct Moving Flank Guard		×	IDT		AR[2]
B2205	Conduct Moving Rear / Adv. Guard		×	IDT		AR[2]
B2206	Conduct Moving Screen		×	IDT		AR[2]
B2207	Conduct Stationary Screen		×	IDT		AR[2]
B2208	Conduct Withdrawal		×	IDT		AR[2]
B2209	Bypass Enemy / Friendly Position at Squadron Level		×	IDT		AR[2]
B2210	Defend		×	IDT		AR[2]
B2211	Conduct Squadron Delay (B)	×		IDT		AR[2]
B2212	Consolidate on Objective / Position		×	IDT		AR[2]
B2213	Conduct Instride Breach of Obstacle		×	IDT		AR[2]
B2214	Conduct Breakout from Encirclement		×	IDT		AR[2]
B2215	Conduct Passage of Lines		×	IDT		AR[2]
B2216	Assist Passage of Lines		×	IDT		AR[2]
B2217	Conduct Relief		×	IDT		AR[2]
B2218	Conduct Linkup		×	IDT		AR[2]
B2219	Conduct Raid (Regt'l Squadron Only)		×	IDT		AR[2]
B2220	Conduct Movement to Contact (B)	×		IDT		AR[2]
B2221	Conduct Hasty Attack		×	IDT		AR[2]
B2222	Conduct Hasty River / Gap Xing		×	IDT		AR[2]
B2223	Conduct Zone Recon (Regt'l Squadron Only)		×	IDT		AR[2]
B2224	Conduct Area Recon (Regt'l Squadron Only)		×	IDT		AR[2]
B2225	Conduct Zone / Area Recon					

	(Div. Squadron Only)		×	IDT		AR[2]
B2226	Fill a Gap		×	IDT		AR[2]
B2227	Conduct Recon / Security Operations on Urbanized Terrain (Div. Squadron Only)					
B2228	Conduct Lines of Communication Surveillance (Div. Squadron Only)		×	IDT		AR[2]

Table 12

	Assault Helicopter Company	Automatic	Operator Implemented	Test Procedure	STRUCCTT	Rating
B2601	Conduct Air Movement Opns		×	IDT	×	A
B2602	Conduct Air Assault Operations (B)	×		IDT	×	A
B2603	Counter Against Enemy ADA for Aircraft Survivability					
	Execute Traveling	×		IDT	×	A[3]
	Actions on Contact	×		IDT	×	A[3]
B2604	Take Active AD measure Against Hostile Aircraft					
B2605	Return to AA and Prepare for Future Operations					
B2606	Report Intelligence Data		×	IDT	×	A
B2607	React to Indirect Fire					
B2608	Move to and Occupy Assembly Area					
B2609	Secure Unit Position					

Table 13

	Attack Helicopter Company	Automatic	Operator Implemented	Test Procedure	STRUCCTT	Rating
B1401	Engage Targets (B)	×		IDT	×	A
	Actions on Contact	×		IDT		AR[2,3]
	Execute Traveling	×		IDT		AR[2,3]
B1402	Conduct JAAT Operations					
B1403	Counter Against Enemy ADA for Aircraft Survival	×		IDT		AR[2]
B1404	Use Active AD Measures					
B1405	Return to AA and Prep for Future Operations					
B1406	Report Intelligence Data		×	IDT	×	A
B1407	Conduct Movement to a Holding Area		×	IDT		AR[2]
B1408	Move to and Occupy Battle Position		×	IDT	×	A
B1409	Move From a Battle Position		×	IDT	×	A
B1410	Conduct Tactical Air Movements as Part of Movement to Contact		×	IDT	×	A
B1411	React to Indirect Fire					

Table 14

Tank Platoon OPFOR		Automatic	Operator Implemented	Test Procedure	STRUCCTT	Rating
Hvy-0001	Column Formation (B)	×		IDT, TSD	×	A
Hvy-0002	Line Formation (B)	×		IDT, TSD	×	A
Hvy-0003	Wedge Formation (B)	×		IDT, TSD	×	A
Hvy-0004	Echelon Left Formation					
Hvy-0005	Echelon Right Formation					
Hvy-0006	Occupy an Assembly Area (B)	×		IDT, TSD		A
Hvy-0008	Attack an Enemy from the March		×	IDT	×	A
Hvy-0009	Take Actions at an Obstacle (B)	×		IDT, TSD	×	A
Hvy-0010	Execute a Fire Engagement (B)	×		IDT, TSD	×	A
Hvy-0011	Consolidation and Reorganization		×	IDT		AR[2]
Hvy-0012	Occupy a Strong Point (B)	×		IDT, TSD	×	A
Hvy-0013	Actions on Incoming Artillery Fire (B)	×		IDT	×	A
Hvy-0014	Conduct Tactical Road March (B)	×		IDT	×	A
Hvy-0015	Conduct a Defense (B)	×		IDT, TSD		A
Hvy-0016	Fire Ambush		×	IDT		AR[2]
Hvy-0017	Forced Crossing of a Water Obstacle					
Hvy-0018	Conduct a Reconnaissance Patrol		×	IDT		AR[2]
Hvy-0019	Provide Force Security (B)	×		IDT		AR[2]
Hvy-0020	Occupy Firing Line		×	IDT	×	A
Hvy-0021	Employ Cover, Concealment, Camouflage, and Deception (C3D)					
Hvy-0022	Assault an Enemy Position (B)	×		IDT, TSD	×	A
Hvy-0023	Take Air Defense Actions (B)	×		IDT	×	A
Hvy-0024	Conduct a Night Attack		×	IDT	×	A

Hvy-0025	Conduct a Night Defense		×	IDT	×	A
Hvy-0026	Attack from Positions in Contact		×	IDT	×	A
Hvy-0027	Occupy a Temporary Defensive Position (B)	×		IDT, TSD	×	A
Hvy-0028	Traveling (B)	×		IDT	×	A
Hvy-0029	Execute Evasive Actions (B)	×		IDT	×	A
Hvy-0030	Withdraw/Disengage (B)	×		IDT, TSD	×	A
	Actions on Contact	×		IDT	×	A[3]

Table 15

	Tank Company OPFOR	Automatic	Operator Implemented	Test Procedure	STRUCCTT	Rating
Hvy-0101	Column Formation (B)	×		IDT, TSD	×	A
Hvy-0102	Line Formation (B)	×		IDT, TSD	×	A
Hvy-0103	Wedge Formation (B)	×		IDT,TSD	×	A
Hvy-0104	Vee Formation					
Hvy-0105	Echelon Right Formation					
Hvy-0106	Echelon Left Formation					
Hvy-0107	Tactical Road March	×		IDT	×	A
Hvy-0108	Traveling (B)	×		IDT, TSD	×	A
Hvy-0109	Occupy Assembly Area	×		IDT		AR[2]
Hvy-0111	Attack from Positions in Contact		×	IDT	×	A
Hvy-0112	Attack from the March	×		IDT	×	A
Hvy-0113	Assault an Enemy Position (B)	×		IDT, TSD	×	A
Hvy-0114	Take Actions at an Obstacle	×		IDT	×	A
Hvy-0115	Execute a Fire Engagement	×		IDT	×	A
Hvy-0116	Consolidation & Reorganization		×	IDT		AR[2]
Hvy-0117	Occupy a Defensive Strong Point (B)	×		IDT, TSD		A
Hvy-0118	Occupy a Temporary Defensive Position (B)	×		IDT, TSD	×	A
Hvy-0119	Conduct a Defense (B)	×		IDT, TSD	×	A
Hvy-0120	Forced Crossing of a Water Obstacle					
Hvy-0121	Provide Security on the Move (B)	×		IDT	×	A
Hvy-0122	Employ Concealment,. Cover, Camouflage, and Deception (C3D)					
Hvy-0123	Take Actions on Incoming Artillery Fire	×		IDT	×	A
Hvy-1024	Take Air Defense Measures	×		IDT	×	A
Hvy-0125	Execute a Night Attack		×	IDT	×	A
Hvy-0126	Conduct a Night Defense					

			×	IDT	×	A
Hvy-0127	Conduct Combat in an Encirclement and Breakout		×	IDT		AR[2]
Hvy-0128	Conduct Defense of a Water Crossing		×	IDT		AR[2]
Hvy-0129	Conduct a Meeting Engagement (B)	×		IDT, TSD		A
Hvy-0130	Withdraw/Disengage (B)	×		IDT	×	A
	Actions on Contact	×		IDT	×	A

Table 16

Tank Battalion OPFOR		Automatic	Operator Implemented	Test Procedure	STRUCCTT	Rating
Hvy-0201	Column Formation (B)	×		IDT	×	A
Hvy-0202	Tactical Road March		×	IDT	×	A
Hvy-0203	Traveling (B)	×		IDT	×	A
Hvy-0204	Occupy Assembly Area (B)	×		IDT		AR[2]
Hvy-0205	Assault Enemy Position		×	IDT	×	A
Hvy-0206	Attack from Position in Contact		×	IDT	×	A
Hvy-0207	Attack from the March (B)	×		IDT	×	A
Hvy-0208	Night Attack		×	IDT		AR[2]
Hvy-0209	Actions at an Obstacle		×	IDT	×	A
Hvy-0210	Fire Engagement		×	IDT	×	A
Hvy-0211	Consolidation and Reorganization		×	IDT		AR[2]
Hvy-0212	Occupy Defensive Strong Point		×	IDT		AR[2]
Hvy-0213	Occupy Temporary Defensive Position		×	IDT		AR[2]
Hvy-0214	Conduct Defense		×	IDT		AR[2]
Hvy-0215	Forced Crossing of Water Obstacle					
Hvy-0216	Security on the Move		×	IDT	×	A
Hvy-0217	Action on Incoming Artillery		×	IDT	×	A
Hvy-0218	Air Defense Measures		×	IDT	×	A
Hvy-0219	Night Defense		×	IDT		AR[2]
Hvy-0220	Defense of a Water Obstacle		×	IDT		AR[2]
Hvy-0221	Meeting Engagement		×	IDT	×	A
Hvy-0222	Withdraw/Disengage		×	IDT	×	A
Hvy-0223	Relief in Place		×	IDT		AR[2]
Hvy-0224	Combat in an Encirclement		×	IDT		AR[2]
Hvy-0225	Line Formation		×	IDT	×	A

Table 17

	Motorized Rifle Platoon	Automatic	Operator Implemented	Test Procedure	STRUCCTT	Rating
Hvy-0302	Actions at an Obstacle (B)	×		IDT	×	A
Hvy-0303	Take Air Defense Measures (B)	×		IDT	×	A
Hvy-0304	Attack from the March		×	IDT	×	A
Hvy-0305	Attack from Positions in Contact		×	IDT	×	A
Hvy-0306	Conduct Reconnaissance Patrol		×	IDT		AR[2]
Hvy-0307	Column Formation (B)	×		IDT, TSD	×	A
Hvy-0308	Conduct Defense (B)	×		IDT, TSD	×	A
Hvy-0309	Consolidation & Reorganization		×	IDT		AR[2]
Hvy-0310	Echelon Left					
Hvy-0311	Echelon Right					
Hvy-0312	Dismount Vehicles (B)	×		IDT, TSD	×	A
Hvy-0313	Forced Crossing					
Hvy-0314	Guard Security (B)	×		IDT, TSD		A
Hvy-0315	Line Formation (B)	×		IDT, TSD	×	A
Hvy-0316	Remount Vehicles (B)	×		IDT, TSD	×	A
Hvy-0317	Conduct Cover, Concealment, Camouflage, and Deception (C3D)					
Hvy-0318	Conduct Night Attack		×	IDT	×	A
Hvy-0319	Occupy Assembly Area (B)	×		IDT, TSD		A
Hvy-0320	Occupy Strong Point (Defense) (B)	×		IDT, TSD	×	A
Hvy-0321	Tactical Road March		×	IDT	×	A
Hvy-0322	Wedge Formation (B)	×		IDT, TSD		A
Hvy-0323	Conduct Night Defense		×	IDT	×	A
Hvy-0324	Fire Engagement (B)	×		IDT,TSD	×	A
Hvy-0325	Withdraw/Disengage (B)	×		IDT, TSD	×	A
Hvy-0326	Assault Enemy Position (B)	×		IDT, TSD	×	A
Hvy-0327	Occupy Temporary Defensive Position (B)	×		IDT, TSD	×	A
Hvy-0328	Traveling (B)	×		IDT	×	A
Hvy-0329	Actions on Incoming	×		IDT	×	A

	Artillery Fire (B)					
Hvy-0330	Take Evasive Action (B)	×		IDT	×	A
	Actions on Contact	×		IDT	×	A[3]

Table 18

Motorized Rifle Company		Automatic	Operator Implemented	Test Procedure	STRUCCTT	Rating
Hvy-0401	Column Formation (B)	×		IDT, TSD	×	A
Hvy-0402	Line Formation (B)	×		IDT, TSD	×	A
Hvy-0403	Wedge Formation (B)	×		IDT	×	A
Hvy-0404	Vee Formation					
Hvy-0405	Echelon Right Formation					
Hvy-0406	Echelon Left Formation					
Hvy-0407	Tactical Road March (B)	×		IDT, TSD	×	A
Hvy-0408	Traveling (B)	×		IDT, TSD	×	A
Hvy-0409	Occupy Assembly Area (B)	×		IDT,TSD		A
Hvy-0410	Withdraw/Disengage (B)	×		IDT	×	A
Hvy-0411	Attack from Positions in Contact		×	IDT	×	A
Hvy-0412	Attack from the March (B)	×		IDT	×	A
Hvy-0413	Assault an Enemy Position (B)	×		IDT	×	A
Hvy-0414	Actions at an Obstacle	×		IDT	×	A
Hvy-0415	Fire Engagement (B)	×		IDT, TSD	×	A
Hvy-0416	Consolidation and Reorganization		×	IDT		AR[2]
Hvy-0417	Occupy a Strong Point (B)	×		IDT, TSD	×	A
Hvy-0418	Occupy a Temporary Defense (B)	×		IDT, TSD	×	A
Hvy-0419	Conduct a Defense (B)	×		IDT, TSD	×	A
Hvy-0420	Forced X-ing					
Hvy-0421	Provide Security on the Move (B)	×		IDT	×	A
Hvy-0422	Employ Cover, Concealment, Camouflage, and Deception (C3D)					
Hvy-0423	Actions on Incoming Artillery (B)	×		IDT, TSD	×	A
Hvy-0424	Take Air Defense Measures	×		IDT	×	A
Hvy-0425	Execute Night Attack		×	IDT	×	A
Hvy-0426	Conduct a Night Defense		×	IDT	×	A
Hvy-0427	Combat in an Encirclement (B)	×		IDT		AR[2]

Hvy-0428	Defense of a Water Obstacle		×	IDT		AR[2]
Hvy-0429	Conduct a Meeting Engagement (B)	×		IDT	×	A
	Actions on Contact	×		IDT	×	A[3]

Table 19

	Motorized Rifle Battalion	Automatic	Operator Implemented	Test Procedure	STRUCCTT	Rating
Hvy-0501	Column Formation (B)	×		IDT	×	A
Hvy-0502	Tactical Road March		×	IDT	×	A
Hvy-0503	Traveling (B)	×		IDT	×	A
Hvy-0504	Occupy Assembly Area (B)	×		IDT		AR[2]
Hvy-0505	Assault Enemy Position		×	IDT	×	A
Hvy-0506	Attack from Positions in Contact		×	IDT	×	A
Hvy-0507	Attack from the March (B)	×		IDT	×	A
Hvy-0508	Night Attack		×	IDT		AR[2]
Hvy-0509	Actions at an Obstacle		×	IDT	×	A
Hvy-0510	Fire Engagement		×	IDT	×	A
Hvy-0511	Consolidation and Reorganization		×	IDT		AR[2]
Hvy-0512	Occupy Defensive Strong Point		×	IDT		AR[2]
Hvy-0513	Occupy Temporary Defensive Position		×	IDT		AR[2]
Hvy-0514	Conduct Defense		×	IDT		AR[2]
Hvy-0515	Forced Crossing of Water Obstacle					
Hvy-0516	Security on the Move		×	IDT	×	A
Hvy-0517	Actions on Incoming Artillery		×	IDT	×	A
Hvy-0518	Air Defense Measures		×	IDT	×	A
Hvy-0519	Night Defense		×	IDT		AR[2]
Hvy-0520	Defense of a Water Obstacle		×	IDT		AR[2]
Hvy-0521	Meeting Engagement		×	IDT	×	A
Hvy-0522	Withdraw/Disengage		×	IDT	×	A
Hvy-0523	Relief in Place		×	IDT		AR[2]
Hvy-0524	Combat in an Encirclement		×	IDT		AR[2]
Hvy-0525	Line Formation (B)	×		IDT	×	A

Table 20

Antitank Squad OPFOR		Automatic	Operator Implemented	Test Procedure	STRUCCTT	Rating
Hvy-2101	Occupy a Defensive Position (B)	×		IDT, TSD	×	A
Hvy-2102	Conduct a Defense (B)	×		IDT, TSD	×	A
Hvy-2103	Conduct a Night Defense		×	IDT	×	A
Hvy-2104	Attack from the March		×	IDT	×	A
Hvy-2105	Attack from Direct Contact with Enemy		×	IDT	×	A
Hvy-2106	Conduct a Night Attack		×	IDT	×	A
Hvy-2107	Employ Maskirovka					
	Execute Movement		×		×	A[3]
Hvy-2108	Air Defense Measures (B)	×		IDT, TSD	×	A
Hvy-2109	Actions on Incoming Artillery (B)	×		IDT, TSD	×	A

Antitank Platoon OPFOR		Automatic	Operator Implemented	Test Procedure	STRUCCTT	Rating
Hvy-2001	Conduct a Defense (B)	×		IDT, TSD	×	A
Hvy-2002	Conduct a Night Defense		×	IDT	×	A
Hvy-2003	Occupy a Defensive Position (B)	×		IDT,TSD	×	A
Hvy-2004	Attack from the March		×	IDT	×	A
Hvy-2005	Attack from Direct Contact with Enemy		×	IDT	×	A
Hvy-2006	Conduct a Night Attack		×	IDT	×	A
Hvy-2007	Employ Maskirovka					
	Execute Movement					
Hvy-2008	Air Defense Measures	×		IDT	×	A
Hvy-2009	Column Formation (B)	×		IDT, TSD	×	A
Hvy-2010	Line Formation		×	IDT	×	A
Hvy-2011	Actions on Incoming Indirect Fire		×	IDT	×	A

Table 22

Dismounted Infantry OPFOR		Automatic	Operator Implemented	Test Procedure	STRUCCTT	Rating
Hvy-2901	Column Formation (B)	×		IDT, TSD		A
Hvy-2902	Line Formation (B)	×		IDT, TSD		A
Hvy-2903	Assembly Area		×	IDT		AR[2]
Hvy-2904	Assault an Enemy Position (B)	×		IDT, TSD	×	A
Hvy-2905	Actions at an Obstacle (B)	×		IDT, TSD	×	A
Hvy-2906	Fire Engagement (B)	×		IDT, TSD	×	A
Hvy-2907	Consolidation & Reorganization					
Hvy-2908	Occupy Defensive Position (B)	×		IDT, TSD	×	A
Hvy-2909	Conduct Defense (B)	×		IDT	×	A
Hvy-2910	Conduct Ambush		×	IDT		AR[2]
Hvy-2911	Reconnaissance Patrol		×	IDT		AR[2]
Hvy-2912	Guard Security		×	IDT		AR[2]
Hvy-2913	Actions on Incoming Artillery (B)	×		IDT, TSD	×	A
Hvy-2914	Air Defense Measures (B)	×		IDT, TSD	×	A
Hvy-2915	Night Attack		×	IDT		AR[2]
Hvy-2916	Night Defense		×	IDT		AR[2]
Hvy-2917	Employ Cover, Concealment, Camouflage, and Deception (C3D)					
Hvy-2918	Clear Obstacle		×	IDT		AR[2]
Hvy-2919	Detect and Clear Minefield		×	IDT		AR[2]
Hvy-2920	Lay Minefield					
Hvy-2921	Traveling (B)	×		IDT, TSD	×	A

Table 23

	Mortar Battery OPFOR	Automatic	Operator Implemented	Test Procedure	STRUCCTT	Rating
Hvy-0601	Column Formation (B)	×		IDT,TSD	×	A
	Execute Movement	×		IDT, TSD		A[3]
Hvy-0602	Tactical Road March (B)	×		IDT	×	A
Hvy-0603	Occupy an Assembly Area		×	IDT, TSD		
Hvy-0604	Employ Maskirovka					
Hvy-0605	Air Defensive Measures (B)	×		IDT, TSD	×	A
Hvy-0606	Occupy a Firing Position (B)	×		IDT, TSD	×	A
Hvy-0607	Conduct Observed Fire Mission		×	IDT	×	A
Hvy-0608	Conduct Unobserved Fire Mission (B)	×		IDT, TSD	×	A
Hvy-0609	Occupy Alternate Position		×	IDT	×	A
Hvy-0610	Defend Position					
Hvy-0611	Take Actions on Incoming Artillery Fire (B)	×		IDT, TSD	×	A

Table 24

	AT Gun Battery (Firing Platoon) OPFOR	Automatic	Operator Implemented	Test Procedure	STRUCCTT	Rating
Hvy-1201	Conduct Defense (B)	×		IDT, TSD	×	A
Hvy-1202	Conduct a Night Defense		×	IDT	×	A
Hvy-1203	Occupy a Defensive Position (B)	×		IDT, TSD	×	A
Hvy-1204	Attack from the March		×	IDT	×	A
Hvy-1205	Attack from Direct Contact with Enemy		×	IDT	×	A
Hvy-1206	Conduct a Night Attack		×	IDT	×	A
Hvy-1207	Employ Concealment, Cover, Camouflage, and Deception (C3D)					
Hvy-1208	Air Defense Measures	×		IDT	×	A
Hvy-1209	Column Formation (B)	×		IDT,TSD	×	A
Hvy-1211	Actions on Incoming Indirect Fire	×		IDT	×	A
Hvy-1212	Occupy a Firing Line		×	IDT	×	A
Hvy-1213	Traveling (B)	×		IDT, TSD	×	A

Table 25

	Self Propelled Howitzer Battery OPFOR	Automatic	Operator Implemented	Test Procedure	STRUCCTT	Rating
Hvy-0701	Column Formation (B)	×		IDT, TSD	×	A
Hvy-0702	Conduct Tactical Road March (B)	×		IDT, TSD	×	A
Hvy-0703	Occupy an Assembly Area		×	IDT		AR[2]
Hvy-0704	Employ Maskirovka					
Hvy-0705	Take Air Defensive Measures (B)	×		IDT, TSD	×	A
Hvy-0706	Occupy Firing Position (B)	×		IDT, TSD	×	A
Hvy-0707	Conduct Observed Fire Mission		×	IDT	×	A
Hvy-0708	Conduct Registration					
Hvy-0709	Conduct Unobserved Fire Mission (B)	×		IDT, TSD	×	A
Hvy-0710	Occupy Alternate Firing Position		×	IDT	×	A
Hvy-0711	Conduct Direct Fire (B)	×		IDT, TSD	×	A
Hvy-0712	Defensive Position		×	IDT	×	A
Hvy-0713	Take Actions on Incoming Artillery Fire (B)	×		IDT, TSD	×	A
	Execute Movement	×		IDT	×	A[3]

Table 26

	Self Propelled Howitzer Battalion OPFOR	Automatic	Operator Implemented	Test Procedure	STRUCCTT	Rating
Hvy-0801	Column Formation (B)	×		IDT	×	A
Hvy-0802	Conduct Tactical Road March (B)	×		IDT	×	A
Hvy-0803	Occupy Assembly Area		×	IDT		AR[2]
Hvy-0804	Actions on Incoming Artillery		×	IDT	×	A
Hvy-0805	Air Defense Measures		×	IDT	×	A
Hvy-0806	Deploy in Battalion Combat Formation (B)	×		IDT	×	A
Hvy-0807	Conduct Registration					
Hvy-0808	Plan Fires for Repulsing the Enemy Attack		×	IDT	×	A
Hvy-0809	Plan Fires for Artillery Support of Forces in Depth		×	IDT	×	A
Hvy-0810	Plan Fire Destruction of Enemy During Counterattack		×	IDT	×	A
Hvy-0811	Plan an Artillery Preparation		×	IDT	×	A
Hvy-0812	Plan Artillery Support of the Attack		×	IDT	×	A
Hvy-0813	Plan Artillery Accompaniment of Forces in Depth		×	IDT	×	A

Table 27

	Towed Howitzer Battery OPFOR	Automatic	Operator Implemented	Test Procedure	STRUCCTT	Rating
Hvy-0901	Column Formation (B)	×		IDT	×	A
	Execute Movement	×		IDT	×	A
Hvy-0902	Conduct Tactical Road March (B)	×		IDT	×	A
Hvy-0903	Occupy Assembly Area		×	IDT		AR[2]
Hvy-0904	Employ Cover, Concealment, Camouflage, and Deception (C3D)					
Hvy-0905	Air Defense Measures	×		IDT	×	A
Hvy-0906	Occupy Firing Position (B)	×		IDT	×	A
Hvy-0907	Conduct Observed Fired Mission		×	IDT	×	A
Hvy-0908	Conduct Registration					
Hvy-0909	Conduct Unobserved Fire Mission	×		IDT	×	A
Hvy-0910	Occupy Alternate Firing Position		×	IDT	×	A
Hvy-0911	Conduct Direct Fire Mission	×		IDT	×	A
Hvy-0912	Defend Position		×	IDT	×	A
Hvy-0913	Actions on Incoming Artillery	×		IDT	×	A

Table 28

	Towed Howitzer Battalion OPFOR	Automatic	Operator Implemented	Test Procedure	STRUCCTT	Rating
Hvy-1001	Column Formation (B)	×		IDT		AR[2]
Hvy-1002	Conduct Tactical Road March (B)	×		IDT		AR[2]
Hvy-1003	Occupy Assembly Area		×	IDT		AR[2]
Hvy-1004	Actions on Incoming Artillery		×	IDT		AR[2]
Hvy-1005	Air Defense Measures		×	IDT		AR[2]
Hvy-1006	Deploy in Battalion Combat Formation (B)	×		IDT		AR[2]
Hvy-1007	Conduct Registration					
Hvy-1008	Plan Fires for Repulsing the Enemy Attack		×	IDT		AR[2]
Hvy-1009	Plan Fires for Artillery Support of Forces in Depth		×	IDT		AR[2]
Hvy-1010	Plan Fire Destruction of Enemy During Counterattack		×	IDT		AR[2]
Hvy-1011	Plan an Artillery Preparation		×	IDT		AR[2]
Hvy-1012	Plan Artillery Support of the Attack		×	IDT		AR[2]
Hvy-1013	Plan Artillery Accompaniment of Forces in Depth		×	IDT		AR[2]

Table 29 (No RAG built; played on battlefield by linking batteries.)

	Regimental Artillery Group	**Automatic**	**Operator Implemented**	**Test Procedure**	**STRUCCTT**	**Rating**
Hvy-1301	Plan Fire Support for Offensive Operations					
Hvy-1302	Conduct Conduct Fires Covering Forces Moving Forward (Phase 1)					
Hvy-1303	Conduct Fire Preparation (Phase 2)					
Hvy-1304	Conduct Fire Support of an Attack (Phase 3)					
Hvy-1305	Conduct Fire Accompaniment (Phase 4)					

Table 30

	Air Defense Battery (SA-15)	Automatic	Operator Implemented	Test Procedure	STRUCCTT	Rating
Hvy-1101	Column Formation (B)	×		IDT		AR[2]
Hvy-1102	Actions on Incoming Indirect Fire	×		IDT		AR[2]
Hvy-1103	Occupy an Assembly Area		×	IDT		AR[2]
Hvy-1104	Conduct Tactical Road March (B)	×		IDT		AR[2]
Hvy-1105	Occupy Firing Position (B)	×		IDT		AR[2]
Hvy-1106	Occupy Alternate Firing Position		×	IDT		AR[2]
Hvy-1107	Engage Aerial Target (B)	×		IDT		AR[2]
Hvy-1108	Target Acquisition Radar					
Hvy-1109	React to Ground Attack	×		IDT		AR[2]
Hvy-1110	Provide Air Defense Coverage		×	IDT		AR[2]
Hvy-1111	Rearm/Refuel		×	IDT		AR[2]
Hvy-1112	Employ Fire Control Radar					
	Remount/Dismount	×		IDT		AR[2,3]
	Execute Movement	×		IDT		AR[2,3]

Table 31

Air Defense Platoon (SA-16/SA-18)		Automatic	Operator Implemented	Test Procedure	STRUCCTT	Rating
Hvy-1401	Column Formation (B)	×		IDT, TSD	×	A
Hvy-1402	Conduct Tactical Road March (B)	×		IDT, TSD	×	A
Hvy-1403	Occupy Assembly Area		×	IDT		AR[2]
Hvy-1404	Actions on Indirect Fire	×		IDT	×	A
Hvy-1405	React to Enemy Dismounted Attack		×	IDT		AR[2]
Hvy-1406	Occupy Firing Position (B)	×		IDT, TSD	×	A
Hvy-1407	Occupy Alternate Firing Position		×	IDT	×	A
Hvy-1408	Engage Aerial Target (B)	×		IDT, TSD	×	A
Hvy-1409	Provide Air Defense Coverage		×	IDT	×	A
	Assault Enemy Position	×		IDT		AR[2,3]
	Remount/Dismount	×		IDT		AR[2,3]
	Execute Movement	×		IDT		AR[2,3]

Table 32

Air Defense Battery (2S6)		Automatic	Operator Implemented	Test Procedure	STRUCCTT	Rating
Hvy-1501	Column Formation (B)	×		IDT, TSD	×	A
Hvy-1502	Take Actions on Incoming Artillery Fire (B)	×		IDT, TSD	×	A
Hvy-1503	Occupy an Assembly Area		×	IDT		AR[2]
Hvy-1504	Conduct Tactical Road March (B)	×		IDT, TSD	×	A
Hvy-1505	Occupy Firing Position (B)	×		IDT, TSD	×	A
Hvy-1506	Occupy Alternate Firing Position		×	IDT	×	A
Hvy-1507	Engage Aerial Target (B)	×		IDT,TSD	×	A
	Execute Movement	×		IDT		AR[2]
Hvy-1508	Target Acquisition Radar (B)		×	TSD		AR[5]
Hvy-1509	React to Ground Attack	×		IDT	×	A
Hvy-1510	Provide Air Defense Coverage (B)	×		IDT, TSD	×	A
Hvy-1511	Rearm/Refuel		×	IDT	×	A
Hvy-1512	Employ Fire Control Radar					

5: Effects of target acquisition radar modeled but radar itself is not modeled.

Table 33

Air Defense Battery (SA-13) CISs		Automatic	Operator Implemented	Test Procedure	STRUCCTT	Rating
Hvy-1601	Column Formation (B)	×		IDT	×	A
	Execute Movement					
Hvy-1602	Take Actions on Incoming Artillery Fire (B)	×		IDT	×	A
Hvy-1603	Occupy an Assembly Area		×	IDT		AR[2]
Hvy-1604	Conduct Tactical Road March (B)	×		IDT	×	A
Hvy-1605	Occupy Firing Position (B)	×		IDT	×	A
Hvy-1606	Occupy Alternate Firing Position		×	IDT	×	A
Hvy-1607	Engage Aerial Target (B)	×		IDT	×	A
Hvy-1608	Target Acquisition Radar					
Hvy-1609	React to Enemy Ground Attack (B)	×		IDT	×	A
Hvy-1610	Provide Air Defense Coverage		×	IDT	×	A
Hvy-1611	Rearm/Refuel		×	IDT	×	A
	Execute Movement	×		IDT		AR[2,3]

Table 34

Reconnaissance Patrol/Platoon		Automatic	Operator Implemented	Test Procedure	STRUCCTT	Rating
Hvy-1701	Column Formation (B)	×		IDT, TSD		A
Hvy-1702	Line Formation		×	IDT		AR[2]
Hvy-1703	Wedge Formation		×	IDT		AR[2]
Hvy-1704	Echelon Right Formation					
Hvy-1705	Echelon Left Formation					
Hvy-1706	Tactical Road March (B)	×		IDT, TSD		A
Hvy-1707	Actions on Contact		×	IDT		AR[2]
Hvy-1708	Actions at an Obstacle	×		IDT		AR[2]
Hvy-1709	Forced Crossing of a Water Obstacle					
Hvy-1710	Occupy an Assembly Area		×	IDT		AR[2]
Hvy-1711	Employ Cover, Concealment, Camouflage, and Deception (C3D)	×		IDT		AR[2]
Hvy-1712	Conduct a Reconnaissance Patrol (area) (B)	×		IDT, TSD		A
Hvy-1713	Provide Outpost Security (OP)		×	IDT		AR[2]
Hvy-1714	Route Reconnaissance		×	IDT		AR[2]
Hvy-1715	Ambush		×	IDT		AR[2]
Hvy-1716	Reconnaissance Raid		×	IDT		AR[2]
Hvy-1717	Strike Raid		×	IDT		AR[2]
Hvy-1718	Air Defense Measures	×		IDT		AR[2]
Hvy-1719	Fire Engagement	×		IDT		AR[2]
Hvy-1720	Disengage from Contact		×	IDT		AR[2]
Hvy-1721	Dismount Vehicle		×	IDT		AR[2]
Hvy-1722	Remount Vehicle		×	IDT		AR[2]
Hvy-1723	Occupy Defense		×	IDT		AR[2]
	Withdraw	×		IDT		AR[2,3]

Table 35

Automatic Grenade Launcher Platoon		Automatic	Operator Implemented	Test Procedure	STRUCCTT	Rating
Hvy-1901	Column Formation (B)	×		IDT, TSD	×	A
Hvy-1902	Line Formation		×	IDT	×	A
Hvy-1903	Traveling (B)	×		IDT, TSD	×	A
Hvy-1904	Occupy an Assembly Area		×	IDT		AR[2]
Hvy-1905	Actions at an Obstacle		×	IDT	×	A
Hvy-1906	Execute a Fire Engagement (B)	×		IDT, TSD	×	A
Hvy-1907	Consolidation and Reorganization		×	IDT		AR[2]
Hvy-1908	Occupy a Defensive Position (B)	×		IDT, TSD	×	A
Hvy-1909	Conduct a Defense		×	IDT		AR[2]
Hvy-1910	Actions on Incoming Artillery	×		IDT	×	A
Hvy-1911	Take Air Defense Measures	×		IDT	×	A
Hvy-1912	Conduct a Night Defense		×	IDT		AR[2]
	Execute Movement	×		IDT		AR[2,3]
	Mount/Dismount	×		IDT	×	A[3]

Table 36

Technical (Construction) Platoon		Automatic	Operator Implemented	Test Procedure	STRUCCTT	Rating
Hvy-2201	Column Formation (B)	×		IDT		AR[2]
Hvy-2202	Conduct Route Clearing Operation (B)	×		IDT		AR[2]
Hvy-2203	Take Actions on Incoming Indirect Fire	×		IDT	×	A
Hvy-2204	Take Air Defense Actions	×		IDT	×	A
Hvy-2205	Construct Defensive Fortifications				×	A
	Dismount/Remount	×		IDT		AR[2,3]
	Movement	×		IDT	×	A[3]
	Cover and Concealment	×		IDT		AR[2,3]
Hvy-2206	Construct Engineer Obstacle (B)	×		IDT		AR[2]
Hvy-2207	Clear Engineer or Natural Obstacle (B)	×		IDT		AR[2]
Hvy-2208	Support and Maintain Crossing of a Water Obstacle					

Table 37

Mine Warfare Platoon		Automatic	Operator Implemented	Test Procedure	STRUCCTT	Rating
Hvy-1801	Column Formation (B)	×		IDT		AR[2]
Hvy-1802	Conduct Tactical Road March (B)	×		IDT		AR[2]
Hvy-1803	Take Actions on Incoming Artillery Fire (B)	×		IDT		AR[2]
Hvy-1804	Take Air Defense Measures (B)	×		IDT		AR[2]
Hvy-1805	Detect and Clear a Minefield					
Hvy-1806	Emplace a Minefield (B)	×		IDT		AR[2]
Hvy-1807	Dismount Engineers from Vehicles					
Hvy-1808	Remount Engineers into Vehicles					
	Execute Movement	×		IDT		AR[2,3]

Table 38

Supply Platoon OPFOR		Automatic	Operator Implemented	Test Procedure	STRUCCTT	Rating
Hvy-2401	Execute Column Formation (B)	×		IDT		AR[2]
Hvy-2402	Conduct Tactical Road March (B)	×		IDT		AR[2]
Hvy-2403	Occupy an Assembly Area		×	IDT		AR[2]
Hvy-2404	Actions When Under Incoming Indirect Fire	×		IDT		AR[2]
Hvy-2405	Conduct Rearm/Refuel Operations (B)	×		IDT		AR[2]
	Cover and Concealment	×		IDT		AR[2,3]

Table 39

Maintenance/Recovery Platoon OPFOR		Automatic	Operator Implemented	Test Procedure	STRUCCTT	Rating
Hvy-2501	Column Formation (B)	×		IDT		AR[2]
Hvy-2502	Conduct Tactical Road March (B)	×		IDT		AR[2]
Hvy-2503	Occupy an Assembly Area		×	IDT		AR[2]
Hvy-2504	Take Air Defense Measures	×		IDT		AR[2]
Hvy-2505	Incoming Artillery (B)	×		IDT		AR[2]
Hvy-2506	Recovery Operations (B)	×		IDT		AR[2]
	Execute Movement	×		IDT		AR[2,3]
	Actions on Contact	×		IDT		AR[2,3]

Table 40

Bridge Platoon OPFOR		Automatic	Operator Implemented	Test Procedure	STRUCCTT	Rating
Hvy-2301	Column Formation (B)	×		IDT		AR[2]
Hvy-2302	Conduct Tactical Road March (B)	×		IDT		AR[2]
Hvy-2303	Occupy Assembly Area		×	IDT		AR[2]
Hvy-2304	Actions When Under Incoming Indirect Fire	×		IDT		AR[2]
Hvy-2305	Air Defense Actions	×		IDT		AR[2]
Hvy-2306	Conduct Bridging Operations (B)	×		IDT		AR[2]
	Cover and Concealment	×		IDT		AR[2,3]

Table 41

Attack Helicopter Flight OPFOR		Automatic	Operator Implemented	Test Procedure	STRUCCTT	Rating
Hvy-2601	Conduct Attack on Ground Target (B)	×		IDT,TSD	×	A
	Execute Travel	×		IDT	×	AR[2]
Hvy-2602	Overcome Air Defense					
Hvy-2603	Conduct Strike on Air Target					
	Attack Running	×		IDT	×	AR[2,3]

Table 42

Ground Attack Fixed Wing Aircraft Flight OPFOR		Automatic	Operator Implemented	Test Procedure	STRUCCTT	Rating
Hvy-2801	Conduct Attack on Ground Target (B)	×		IDT, TSD	×	A
Hvy-2802	Overcome Air Defense					
Hvy-2803	Conduct Strike on Air Target					
	Actions on Contact	×		IDT		AR[2,3]

UNIT	TASKS	IMPLEMENTED		TESTED by:		STRUCCTT
		AUTO	OPR ASSIST	IDT	AMSAA, TRAC,TSD	
BLUFOR						
1. Tank Platoon	49	35	8	43	24	28
2. Mech Platoon	58	41	13	58	24	28
3. Company Team	47	26	20	46	8	16
4. Bn Scout Plt	23	11	10	21	0	11
5. ADA Plt	18	9	7	16	0	9
6. Anti-Armor Plt	---------- Not Implemented ----------					
7. Anti-Armor Co	---------- Not implemented ----------					
8. Bn Task Force	25	4	21	25	0	0
9. Arm/Cav Trp	28	14	12	26	0	0
10. Air Cav Trp	15	4	5	9	0	0
11. Arm Cav Sqdn	28	4	23	27	0	0
12. Assault Hel Co	11	3	2	5	0	0
13. Attack Hel Co	13	4	5	9	0	0
Subtotals	315	155	126	285	56	92
OPFOR						
14. Tank Plt	30	18	8	26	11	20
15. Tank Co	30	19	6	25	9	19
16. Tank Bn	25	4	20	24	0	14
17. MR Plt	30	19	7	26	13	21
18. MR Co	30	20	5	25	10	21
19. MR Bn	25	5	19	24	0	14
20. Anti-Tank Sqd	10	4	5	8	4	9
21. Anti-Tank Plt	12	4	6	10	3	10
22. Dsmntd Inf	21	10	8	18	9	8
23. Mortar Btry	12	7	3	10	7	8
24. AT Gun Btry	12	6	5	11	4	11
25. SP How Brtry	14	8	4	12	7	11
26. SP How Bn	13	3	9	12	0	11
27. Towed How Btry	13	8	4	12	0	11
28. Towed How Bn	13	3	9	12	0	0
29. Regt Arty Gp	---------- Not Implemented ----------					
30. AD Btry (SA-15)	14	8	4	12	0	0
31. AD Plt (SA-16)	12	8	4	12	4	7

32. AD Btry (2S6)	13	8	4	12	7	9
33. AD Btry (SA-13)	13	7	4	11	0	9
34. Recon Plt	24	8	13	21	3	0
35. Auto Grenade Launcher Plt	14	8	6	14	4	9
36. Technical (Construction) Plt	11	9	0	9	0	4
37. Mine Warfare Plt	9	6	0	6	0	0
38. Supply Plt	6	5	1	6	0	0
39. Maint/Recovery Plt	8	7	1	8	0	0
40. Bridge Plt	7	6	1	7	0	0
41. Atk Hel Flight	5	3	0	3	1	3
42. FW Gnd Atk	4	2	0	2	1	1
Subtotals	430	223	156	378	97	230
Grand Totals	745	378	282	663	153	322
				88.99%	20.54%	43.22%

(1) Included in all IDT-tested CIS's

NOT IMPLEMENTED

1. Execute a Coil Formation
   Execute a prepared obstacle
   Construct a hasty obstacle
   Emplace a Hasty Protective minefield
   Perform Maintenance Operations
   Establish an OP
2. Knock out bunker
   Move (MOUT)
   Conduct vehicle operations
   Execute a Coil Formation
3. Perform Tailgate Resupply
4. Perform platoon maintenance operations
   Establish an OP
5. React to smoke operations
   Employ physical security measures
9. Organize Troop CSS
   Operate Troop CP
10. Conduct JAAT operations
    Use countermeasures against ADA to ensure aircraft survival
    Take active air defense measures against hostile aircraft
    Return to AA, prep for future operations
    Egress to assembly area
    React to indirect fire
11. Conduct Recon/Security Opns on urbanized terrain
12. Use countermeasures against ADA to ensure aircraft survival
    Take active air defense measures against hostile aircraft
    Return to AA, prep for future operations
    React to indirect fire
    Move to and occupy AA
    Secure unit position
13. Conduct JAAT operations
    Use active AD measures

Return to AA, prep for future operations
React to indirect fire
14. Echelon Left Formation
Echelon Right Formation
Forced crossing of a water obstacle
Employ cover, concealment, camouflage and Deception (C3D)
15. Echelon Left Formation
Echelon Right Formation
Vee Formation
Forced crossing of a water obstacle
Employ cover, concealment, camouflage and Deception (C3D)
16. Forced crossing of a water obstacle
17. Echelon Left Formation
Echelon Right Formation
Forced crossing of a water obstacle
Employ cover, concealment, camouflage and Deception (C3D)
18. Echelon Left Formation
Echelon Right Formation
Vee Formation
Forced crossing of a water obstacle
Employ cover, concealment, camouflage and Deception (C3D)
19. Forced crossing of a water obstacle
20. Employ Maskirovka
21. Employ Maskirovka
Execute movement
22. Consolidate and Reorganize
Employ cover, concealment, camouflage and Deception (C3D)
Lay minefield
23. Employ Maskirovka
Defend Position
24. Employ cover, concealment, camouflage and Deception (C3D)
25. Employ Maskirovka
Conduct registration
26. Conduct registration
27. Conduct registration
28. Conduct registration

30. Employ Fire Control radar
31. Target Acquisition Radar
    Employ Fire Control radar
33. Execute movement
    Target Acquisition Radar
34. Echelon Left Formation
    Echelon Right Formation
    Forced crossing of a water obstacle
36. Construct Defensive Fortifications
    Support and Maintain Crossing of a Water Obstacle
37. Detect and Clear a Minefield
    Dismount Engineers from vehicles
    Remount Engineers into Vehicles
41. Overcome Air defense
    Conduct Strike on Air Target
42. Overcome Air defense
    Conduct Strike on Air Target

ANNEX D INFORMATION SOURCES

GENERAL MANAGEMENT DOCUMENTATION

The following documents are either referenced in this Plan or are applicable to its content:

a. Army Regulation 5-11: U.S. Army Model and Simulation Management Program, 1 Aug 97.
b. DA Pamphlet 5-11: Verification, Validation, and Accreditation of Army Models and Simulations, 15 Oct 93.
c. Test and Evaluation Master Plan (TEMP) for CCTT.
d. Training Device Requirement (TDR) for CCTT, 14 Jan 98.
e. Computer Resources Management Plan (CRMP) for CCTT.
f. Naval Air Warfare Command - Training Systems Division (NAWC-TSD) System Specifications for CCTT
g. Various Operator Technical Manuals (TM -10) (Operator tasks and controls data).
h. Various Maintenance Manuals (TM -24P & -34P) (Parts
i. fidelity, design data).
j. DA PM, CATT, Close Combat Tactical Trainer (CCTT) Verification, Validation, and Accreditation (VV&A) Master Plan, version 1.0, 6 October 1995.
k. TSM CATT, Combat Tactical Trainer (CCTT) Accreditation Plan, 1 September 1998.

D.1 . GOVERNMENT DOCUMENTATION

The following documents are applicable to the CCTT accreditation process:

Document Number	IV&V	Document Description
MIL-STD-1815A	Yes	ADA Programming Language, January 22, 1983
(None)	Yes	AMSAA VV&A Plans, January 1995
DAAB07-92-D-Q514, *TAM No. 94-41a,b*	Yes	CCTT Primary/Secondary I, & A, June 11, 1993
DOD-STD-2167A	Yes	Defense System Software Development, February 29, 1988
PM91-W024 SOWCN-2	Yes	Project Manager for Training Devices Statement of Work for Close Combat Tactical Trainer, April 20, 1992
(None)	Yes	CECOM Software Independent Verification & Validation Plan, September 1995
Draft	Yes	EAC Independent Evaluation Plan for the Close Combat Tactical Trainer, April 15,1994
MIL-STD-498	No	Defense System Software Development,
MIL-STD-973	No	Configuration Management
MIL-STD-59B	No	CALS
Task Performance Support Codes	Yes	Task Performance Support Codes Document June 6, 1995

D.2. CONTRACTOR'S DOCUMENTATION

The following documents are referenced in the Contractor's Software IV&V Plan and are applicable to the CCTT accreditation process:

Document Number	Document Description
95-CCTT-LFS-00111 *Revision A*	CCTT Software Test Program Plan (STPP), February 28, 1995
95-CCTT-LFS-00116 *Revision B, Change 1*	CCTT Prime Item Development Specification, March 1, 1995
94-CCTT-LFS-00211 *Revision A, Change 1*	CCTT Software Development Plan (SDP), September 2, 1994
[TBD]	CCTT Configuration Management Plan, [TBD]

Document Number	Document Description
93-IBM-DR-0034	Critical Task Analysis Report, May 28, 1993
(None)	DRC Fidelity Analysis Reports for CCTT Manned Modules, June, 1993
	IBM Proposal for CCTT System Design, February 5, 1992
(None)	System Test Program Plan
94-CCTT-LFS-00281 *Revision*	

D.3. INDEPENDENT V&V (IV&V) CONTRACTOR'S DOCUMENTATION

The following documents are applicable to the CCTT accreditation process:

Document Number	Document Description
(None)	IV&V Requirements Traceability Report for Close Combat Tactical Trainer - Fidelity Analysis-to-PIDS Traceability Assessment for the M113A3, M1A2, HMMWV and DI Manned Modules, *January 30, 1995.*
(None)	IV&V Requirements Traceability Report for Close Combat Tactical Trainer - IBM Proposal for CCTT-to-PIDS Traceability Assessment, *March 29, 1995.*
(None)	IV&V Requirements Traceability Report for Close Combat Tactical Trainer - Training Device Requirement-to-PIDS Traceability Assessment, *April 17, 1995.*
(None)	IV&V Requirements Traceability Report for Close Combat Tactical Trainer - Critical Task Analysis-to-PIDS Traceability Assessment for the AAR, MC and MCC Workstations, *November 9, 1994.*
(None)	IV&V Requirements Traceability Report for Close Combat Tactical Trainer - M2A2/M3A2 Fidelity Analysis-to-PIDS Traceability Assessment, *November 9, 1994.*
(None)	IV&V Requirements Difference Assessment - Prime Item Development Specification and System Specification for the Close Combat Tactical Trainer*, July 11, 1994.*
(None)	IV&V Requirements Traceability Report for Close Combat Tactical Trainer - Critical Task Analysis-to-PIDS Traceability Assessment, *May 6, 1994.*
(None)	IV&V Requirements Traceability Report for Close Combat Tactical Trainer - M1A1 Fidelity Analysis-to-PIDS Traceability Assessment, *August 12, 1994.*
(None)	IV&V Requirements Traceability Report for Close Combat Tactical Trainer - Critical Task Analysis-to-PIDS Traceability Assessment for the UOSP and SAF Workstations, *September 20, 1994.*

ANNEX E
SUBJECT MATTER EXPERTS (SME)

The CCTT Subject Matter Experts are identified below:

Agency	**POC/Office Symbol**	**Phone/DSN**
Air Defense School Fort Bliss, TX 79916-0002	Jaime Macias Attn: ATSA-DTS-I	915-568-1678 978
Engineer School Fort Leonardwood, MO 65473	Billy J. Montogomery Attn: ATSE-PD-NES	314-563-7649 676
Infantry School Fort Benning GA 31905	Gary Hubbard Attn: ATSH-OTY-S	706-545-3843 835
AMSAA Aberdeen Proving Grounds,MD	Ken Steiner Attn: AMSXY-CD	410-278-3368 298
BRL	Tony Baran Attn: SLCBR-SE(ACO)	410-278-8688 298
TECOM	Koon Kit-Yu Attn: AMSTA-TA-M	410-278-5278 298
Threat Support Directorate Fort Leavenworth, KS	James Hicks Attn:ATZL-CST-T	913-684-7961 552
CAC-TR	Attn:ATZL-CTS-B	913-684-3189 552
TRAC-SAD	Rudy Pabon Attn:ATRC-SAD	913-684-3030 552
TSM CATT	Jeff Wilkinson ATZL-NSC-C	913-684-8263 552
Armor School Fort Knox, KY 40121	Larry Herzog	502-624-5656 464
Aviation Center Fort Rucker, AL 32362	Bob Wofington Attn: ATZQ-TD	205-255-9159 558
TRAC-WSMR White Sands, NM 88002	Lee Kirby Attn: ATRC-WE	505-678-1012 258
Artillery School Fort Sill, OK 73053	CW3 Coulter Attn: ATSF-CBL	405-351-3919 639

USAF Langley AFB, VA 2366502778	MAJ Buck Waldrop Attn: HQ ACC/XPJO	804-764-2985 574

ANNEX F ABBREVIATIONS

AAR	After Action Review
ACC	Air Combat Command
AIS	Automated Information Systems
AMC	Army Materiel Command
AMC REG	Army Materiel Command Regulation
AMCCOM	Armament, Munitions and Chemical Command
AMSAA	Army Materiel Systems Analysis Activity
APSE	Ada Program Support Environment
AR	Army Regulation
ARI	Army Research Institute
ARL	Army Research Laboratory
ASARC	Army Systems Acquisition Review Council
ATACMS	Army Tactical Missile System
ATC	Aberdeen Test Center
ATCOM	Aviation and Troop Support Command
BFVS	Bradley Fighting Vehicle System
BLD	Software Build
BLUFOR	Blue Forces
C2V	Command and Control Vehicle
C/A	Contract Awarded
CAC-T	Combined Arms Command - Training
CAS	Close Air Support
CASE	Computer Aided Software Engineering
CATT	Combined Arms Tactical Trainer
CCB	Configuration Change Board
CCTT	Close Combat Tactical Trainer
CDR	Critical Design Review
CE	Concurrent Engineering
CECOM	Communications-Electronics Command
CES	Combat Engineer Station
CFV	Calvary Fighting Vehicle
CGF	Computer Generated Forces
CIS	Combat Instruction Sets
CM	Configuration Management
CMP	Configuration Management Plan
COEA	Cost and Operational Effectiveness Analysis
COTS	Commercial Off-the-Shelf
CRMP	Computer Resources Management Plan
CRWG	Computer Resources Working Group
CSC	Computer Software Component
CSCI	Computer Software Configuration Item
CSE	Computer Software Engineer

CSTA	Combat Systems Test Activity
CSU	Computer Software Unit
CT	Contractor in Plant Test
CTCP	Combat Trains Command Post
DA	Department of the Army
DA PAM	Department of the Army Pamphlet
DCSLOG	Deputy Chief of Staff for Logistics
DCS-T	Deputy Chief of Staff for Training
DIM	Dismounted Infantry Module
DIS	Distributed Interactive Simulation
DMA	Defense Mapping Agency
DMSO	Defense Modeling and Simulation Office
DOCATS	Document Catalog System
DOD	Department Of Defense
DT&E	Developmental Test & Evaluation
DTP	Detailed Test Plan
DTR	Detailed Test Report
ECAC	Electromagnetic Compatibility Analysis Center
ECDB	Equipment Characteristics Data Base
FAAD	Forward Area Air Defense
FABTOC	Field Artillery Battalion Tactical Operations Center
FDC	Fire Direction Center
FIST-V	Fire Support Team Vehicle
FQT	Functional Qualification Test
FSE	Fire Support Element
FUE	First Unit Equipped
FY	Fiscal Year
HMMWV	High Mobility, Multipurpose Wheeled Vehicle
HRED	U.S. Army Human Resource Engineering Directorate
IAW	In Accordance With
IDD	Interface Design Document
IDT	Integrated Development Team
IEP	Independent Evaluation Plan
IER	Independent Evaluation Report
IOT&E	Initial Operational Test and Evaluation
IRS	Interface Requirements Specification
IV&V	Independent Verification and Validation
LAN	Local Area Network
LCSEC	Life Cycle Software Engineering Center
LUT	Limited User Test

MACOM	Major Commands
MANPRINT	Manpower and Personnel Integration
MC	Maintenance Console
MCC	Master Control Console
MCSD	Maneuver Control Systems Directorate
MICOM	Missile Command
MLRS	Multiple Launch Rocket System
MM	Manned Module
MOS	Military Operational Specialty
M&S	Modeling and Simulation
MS	Milestone
MTP	Mission Training Plan
NAWC-TSD	Naval Air Warfare Center-Training Support Directorate
NGIC	National Ground Intelligence Center
NTC	National Training Center
NVEOL	Night Vision Electro-Optics Laboratory
O/C	Observer/Controller
OPFOR	Opposing Forces
OPTEC	Operational Test and Evaluation Command
OT&E	Operational Test and Evaluation
OTP	Outline Test Plan
OTRR	Operational Test Readiness Review
P3I	Preplanned Product Improvement
PCA	Physical Configuration Audit
PDL	Programming Design Language
PDR	Preliminary Design Review
PDSS	Post Deployment Software Support
PDU	Protocol Data Unit
PG	Procedures Guide
PIDS	Prime Item Description Specification
PM	Program Manager/Project Manager/Product Manager
PM CATT	Program Manager Combined Arms Tactical Trainer
PPQT	Preproduction Qualification Test
PPSS	Post Production Software Support
PTR	Program Trouble Report
QS	Quick Start
RAM	Reliability, Availability and Maintainability
RCI	Resource Consultants, Inc.
RFP	Request For Proposal
RQT	Reliability Qualification Test

RTM	Requirements Traceability Management
SAFOR/SAF	Semi Automated Forces
SAIC	Science Applications International Corporation
SCM	Software Configuration Management
SDDs	Software Design Document
SDF	Software Development Files
SDP	Software Development Plan
SED-SSO	Software Engineering Directorate-STRICOM Support Office
SI	System Integration
SIMNET	SIMulation NETwork
SMEs	Subject Matter Experts
SINGCARS	Single Channel Ground and Airborne Radio Systems
SOP	Standing Operating Procedures
SPR	Software Program Review
SPSs	Software Product Specifications
SQA	Software Quality Assurance
SRSs	Software Requirements Specification
STD	Software Test Description
STP	Software Test Plan
STPP	Software Test Program Plan
STRICOM	U.S. Army Simulation, Training, and Instrumentation Command
SW	Software
TACOM	Tank Automotive Command
TACP	Tactical Air Control Party
TBD	To Be Determined
TPSC	Task Performance Support Codes
T&E	Test and Evaluation
TDR	Training Device Requirement
TEC	Topographic Engineering Center
EAC	Evaluation Analysis Center
TEMP	Test and Evaluation Master Plan
TEP	Test and Evaluation Plan
TER	Test and Evaluation Report
TEXCOM	U.S. Army Test and Experimentation Command
TIR	Test Incident Report
TIWG	Test Integration Working Group
TOC	Tactical Operations Center
TRAC-WSMR	TRADOC Analysis Command-White Sands Missile Range
TRADOC	Training and Doctrine Command
TREDS	Training Exercise Development System
TRR	Test Readiness Review
TSD	Threat Support Directorate
TSM	TRADOC System Manager

TSM CATT	TRADOC System Manager for Combined Arms Tactical Training
TSP	Training Support Package
TTCF	Training environment Task Contribution Factor
TTCF-E	Training environment Task Contribution Factor - Execution
TTCF-F	Training environment Task Contribution Factor - Feedback
TTSD	TRADOC Threat Support Directorate
UMCP	Unit Maintenance Collection Point
USAARMC	U.S. Army Armor Center
USAATC	U.S. Army Aberdeen Test Center
USAAVNS	U.S. Army Aviation School
USACMLS	U.S. Army Chemical School
USADS	U.S. Army Air Defense School
USAEC	U.S. Army Engineer Center
USAFAS	U.S. Army Field Artillery School
USAIS	U.S. Army Infantry School
USASCAS	U.S. Army Signal Center and School
USAEAC	U.S. Army Evaluation Analysis Center
V & V	Verification and Validation
VV&A	Verification, Validation and Accreditation
WS	Work Statement
WS	Work Station

ANNEX G GLOSSARY

Acceptability Criteria	A set of standards that a particular M&S must meet to be accredited for a given use.
Accreditation	An official determination by management that an M&S is acceptable for a specific purpose.
Core Team Members	Those members of the Accreditation Review Team that participate in all aspects of the review process.
Support Team Members	Those members of the Accreditation Review Team that participate in the review process on a part time basis as needed to assist in the review.